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COMMUNICATIONS.

SEVEN CASES OF GANGRENOUS STOMATITIS.

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During the month of July of this year there were brought to the Children's Hospital of Philadelphia from an Orphanage in this city, seven cases of gangrenous stomatitis. The disease had developed in these cases, after an epidemic of measles, which had existed in the institution from which they came, and they all presented the well-marked symptoms of this affection, gangrene of the mucous membrane and gums, with loosening of the teeth, and necrosis of the periosteum and jaws, to a greater or less extent, and, in several of the most severe cases, gangrene involving the thickness of the cheeks. These cases at the same time presented the marked constitutional symptoms of the disease.

Case I.—Mary McC., aged $4\frac{1}{2}$ years, was admitted to the Children's Hospital, July 5th, 1887. This patient was attacked with measles on June 4th, and apparently made a good recovery, but about July 1st it was noticed that a dark ulcerated spot had appeared over the second right incisor tooth, and this spot increased rapidly in size.

When examined at the hospital, the mucous membrane and gum of the alveolar portion of the right upper jaw were found to be in

a gangrenous condition, the alveolus was blackened and necrosed, the teeth were black and quite loosely held in their sockets, and the gangrene had to some extent involved the mucous membrane of the cheek upon the corresponding side.

The child was much emaciated, and had a very offensive discharge from the mouth, and a temperature which varied from 103° to 104° .

The patient was etherized and the loosened teeth were removed, the sloughing tissue was scraped away, and the whole of the gangrenous surfaces were swabbed with fuming nitric acid.

The patient was then ordered a mouth-wash composed of chlorate of potassium, tincture of myrrh, glycerine and water, which the nurse was directed to apply at frequent intervals. The patient was also put upon quinine and iron, and stimulants.

Upon the following day it was observed that the gangrenous process had attacked the lower jaw upon the same side, and had involved the soft parts adjacent. The loose teeth were removed, and the parts were thoroughly cauterized with nitric acid.

At this time the patient was conscious and took nourishment well, but suffered from pneumonia of the right lung, and had a very profuse diarrhoea, the temperature being 104° .

Upon the third day after its admission to the hospital, the child developed perforating gangrene of the cheek, and from the exposed alveolar sockets of the lower jaw, had a very profuse hemorrhage, which was only controlled by packing with dry lint.

The patient, after the hemorrhage, was in a state of collapse from which it only partly re-acted, and died some eight hours subsequently.

Case II.—Annie L., aged 2½ years, was admitted to the Children's Hospital on July 4th, 1887, having suffered from measles on June 12th. It was observed in this case that after the rash had disappeared the fever continued for some time; and that there appeared about July 1st a soft reddish spot over the second right incisor.

Upon examination, after admission to the hospital, it was found that a considerable portion of the alveolus of the right upper jaw was black and necrosed, the gum near the necrosed alveolus was gangrenous, and the adjacent mucous membrane of the cheek was also involved to some extent. The gangrenous tissues were scraped away, and the surfaces touched with nitric acid. The patient was put upon the same treatment as in the previous case.

This patient had a temperature of 101.3°, and suffered from a profuse diarrhoea, but took its nourishment well, and continued to improve for ten days, when the temperature again became elevated, and it was noticed that gangrene had again appeared at its former situation.

The same local treatment was again adopted, namely, the use of nitric acid, and after this time the patient made a good recovery. After the removal of the necrosed alveolus, which had become loose, she was discharged from the hospital in good condition.

Case III.—James S., aged 4½ years, was admitted to the Children's Hospital, July 8, 1887, having been attacked with measles, June 14th. On June 20th, there were noticed ulcerated spots upon the mucous membrane of the gum of the left upper jaw, and of the right lower jaw. Examination at the time of his admission showed extensive necrosis of the alveolus of the left upper jaw, and a greyish sloughing condition of the gums and mucous membrane of the left cheek; the alveolus of the right lower jaw and the soft parts adjacent thereto were also involved.

The loose teeth were removed and the parts thoroughly touched with nitric acid, and the same local and constitutional treatment was applied as in the other cases. This patient also suffered from a profuse diarrhoea, and had a temperature ranging from 102° to 104°.

In spite of treatment this patient became rapidly worse, the discoloration of the cheeks extending, and spots of gangrene appearing

over the left cheek and lower portion of the right cheek; the patient died of exhaustion on July 11th.

A post-mortem examination was made in this case by my colleague, Dr. G. E. de Schweinitz, who has furnished the following notes:

Autopsy six hours after death; body of an emaciated male child; spots of gangrene in the left cheek, over the body of the inferior maxilla, and over the mastoid process of the right side; very slight post-mortem rigidity and posterior ecchymoses.

Thorax: The entire contents of the thorax appeared perfectly natural.

Abdomen: Position of viscera about normal; no fluid. *Liver:* Enlarged, its tissue firm and congested; some recent adhesions between its under surface and the hepatic flexure of the colon. The gall bladder distended with bile of a pale-yellow color; the ducts pervious. *Spleen:* Normal in size and consistence. *Kidneys and supra-renal capsules:* These showed no gross changes; some few adhesions existed between the anterior surfaces of the kidneys and the ascending and descending colon respectively; these adhesions were most marked upon the right side.

Stomach and intestines: In the stomach and small intestines no gross lesions were discovered. The mucous membrane of the head of the colon and appendix was thickened and congested, but not ulcerated. The mucosa of the ascending and transverse colon was spotted over with round oval patches of grayish false membrane, separated from each other by areas of swollen and congested mucous membrane. This condition became more marked as the descending colon was reached, and just above the sigmoid flexure these deposits became confluent, so that the entire inner surface of the gut was completely covered over with a dense, gray-white, granular false membrane. This state of affairs continued to the end of the rectum. The walls of the large intestine were everywhere thickened and in the region just described measured 1.5 cm. in thickness.

The mesenteric and retroperitoneal glands were enlarged and soft. The rest of the abdominal organs were normal. The brain and spinal cord were not examined. *Microscopical examination* of the large intestine showed very well the lesions of *diphtheritic dysentery*. The necrosis of the mucous membrane was in places superficial, but in the lower portions of the gut the entire mucosa had been substituted by a granular mass in which structural elements were no longer recognizable. The sub-mucosa was infiltrated

with small cells. No such infiltration existed in the muscular layers, and hence the thickening of the walls depended upon this deposit of false membrane and the swelling and infiltration of the sub-mucosa.

Case IV.—James F., aged 4 years, was admitted to the Children's Hospital, July 9th, 1887, having suffered from measles during the month of June. Examination of the patient at the time of his admission to the hospital showed that the alveolus of the upper jaw corresponding to the four incisors was blackened and necrosed; the hard palate was also extensively necrosed and exposed, while the gum and mucous membrane of the upper lip and a portion of the soft palate were in a gangrenous condition. The same local and constitutional treatment was instituted in this case as in the others.

This patient suffered from diarrhoea, which at times was profuse, and had a temperature of 102° , but gradually improved until the tenth day, when his temperature suddenly became elevated, and examination showed that the gangrene had again begun to spread and that a portion of the lower jaw and gum were also involved.

The affected parts were again cauterized with nitric acid, and after this time his improvement was continuous, and at the time of this report he is in good condition although the necrosed bone has not yet separated.

The following cases were not admitted to the hospital, but were treated in the surgical out-patient department by the surgeon on duty, Dr. Edward Martin:

Case V.—John S., aged 4 years, was brought to the out-patient department of the hospital, July 5th, 1887, having had measles during the month of June. He suffered from necrosis of the alveolus and gangrene of the gum of the upper jaw about the location of the right upper canine tooth. The gangrenous tissue was scraped away and the surface was touched with nitric acid, the loose teeth being removed. The same local and constitutional treatment was instituted as in the previously reported cases and the patient made a good recovery.

Case VI.—Katie R., aged $5\frac{1}{2}$ years, was brought to the out-patient department of the hospital, July 5th 1887, having suffered from measles in June. This patient presented a patch of gangrenous tissue and necrosed alveolus corresponding to the position of the lower left canine tooth. The loose teeth were removed and the same treatment was applied as in the other cases, and the patient made a good recovery.

Case VII.—Mamie C., aged 4 years, was brought to the out-patient department of the hospital, July 5th, 1887, having suffered from measles during the month of June. She presented necrosis of the alveolus and gangrene upon the left side of the lower jaw. The same treatment was instituted, and the patient made a good recovery.

REMARKS.—Gangrenous stomatitis is comparatively a rare disease and is only seen among the ill nourished children of the very poor classes, or in homes or asylums for children where the inmates are often overcrowded and poorly fed, and where there are naturally many cases whose constitutional condition predisposes them to poor nutrition.

The disease is usually developed in such subjects after some acute disease, such as measles, scarlet or typhoid fever, and is also said to have been observed after pneumonia, bronchitis and dysentery. As sequelæ of the latter diseases I have never seen the affection, and in the cases which have come under my personal observation I have generally been able to trace its origin to an attack of measles. I think all authorities are agreed that measles is the disease upon which this affection, in suitable cases, is most apt to follow, and in this country it is certainly very unusual to see gangrenous stomatitis develop after the exhausting intestinal diseases of children which are so common during the summer months.

There has recently been described a special form of micrococcus which is supposed to be directly concerned in the production of gangrenous stomatitis, and further investigation may establish its pathological significance.

It is still a mooted point whether or not the administration of mercury in the treatment of the acute diseases of children has any causative relation to the development of gangrenous stomatitis. In the previously reported cases I have ascertained that this drug was not administered, and indeed I am inclined to agree with Mr. Heath, who thinks that the extensive necrosis of the jaws and destruction of the soft parts of the mouths of children, which were formerly so generally attributed to the administration of this drug, were really sequelæ of the exanthemata.

The disease generally first appears as a spot of ulceration upon the mucous membrane of the gums and rapidly extends to the jaw and cheek.

Gangrenous stomatitis, when well developed, cannot well be confounded with any other disease, and it is only in the very

early stage of this affection that it is possible to confuse it with the much less grave affection, ulcerative stomatitis.

If one examines carefully the mouth of a patient suffering from gangrenous stomatitis, he will see upon the gums or upon the mucous membrane of the swollen cheek an ulcerated surface covered with a brownish or greenish or dirty gray colored slough surrounded by cedematous mucous membrane. If the disease is well advanced, the bone of the jaw and soft palate may be seen blackened and dead, and the discolored teeth are found to be loosely held in their sockets and may be shed or can be easily drawn. There is also a profuse discharge of fetid saliva, and the sub maxillary lymphatic glands are generally enlarged.

In severe cases the gangrenous process extends rapidly to the cheek where a black slough appears, and this may drop out leaving the cavity of the mouth exposed, causing the patient to present a most horrible deformity.

The seat of perforation of the cheek is generally continuous with the most extensive seat of disease in the jaw; the cheek corresponding to either the upper or the lower jaw may be involved. I remember a case which was under my care at the Children's Hospital a few years ago, in which a portion of the lower lip and chin was destroyed by a slough; in this patient recovery took place and the deformity was very well relieved by a plastic operation. If patients survive after extensive destruction of the cheek it is often impossible to obtain sufficient flaps to cover the gap in the cheek, and there is often so much cicatricial contraction that the motion of the lower jaw is impaired or it may be completely locked; in either of these events the patient presents a most miserable condition.

During the time that these local conditions exist in the mouth the patient has a more or less elevated temperature, but generally rests well and rarely refuses nourishment; it is often remarkable to see these patients continue to take nourishment with apparent relish almost up to the time of the fatal termination.

The principal complications occurring in the course of the disease are diarrhoea, broncho-pneumonia and hemorrhage. The former of these is I think one of the most constant complications and is probably due to the ingestion of gangrenous or septic matter with the food, and the exhaustion following it is a very frequent cause of death. In Case III, in which a post-mortem examination was made, the causation of the diarrhoea is ex-

plained by the condition of the mucous membrane of the large intestine.

Broncho-pneumonia is another complication of comparative frequency and is probably produced by the aspiration of gangrenous fluids and gases into the air passages.

Hemorrhage occurring at the time of the separation of the sloughs, may be a serious complication, and in Case I. the exhaustion following this accident was an important factor in the fatal issue.

In the treatment of this disease, it is most important that the patient be given a nutritious and early assimilated diet together with stimulants; and at the same time the administration of quinine and iron with the mineral acids is often followed by the best results. The administration of opium has been recommended in this affection by reason of the influence it seems to exert in controlling the spread of gangrenous diseases; but with its use in this disease I have had no personal experience. The local treatment which I have found most satisfactory is the removal of the gangrenous tissue as far as possible by scraping, and the thorough application of nitric acid to the affected parts. The application of the actual cautery to the diseased surfaces (and the most convenient form for its use is by means of Pacquelin's cautery,) has also been highly recommended and it has the advantage over the use of nitric acid, that its action is more readily controlled.

The mouth should be kept constantly washed with some form of disinfectant solution, and I have used with advantage a solution of chlorate of potassium with glycerine and tr. myrrh, or an infusion of sumac with chlorate of potassium.

In cases which terminate favorably, the sloughs separate and the ulcerated surfaces are covered with healthy granulations; the necrosed bone becomes loose, and is either thrown off or can be easily removed; and with the improvement in the local condition there is a corresponding change in the patient's constitutional state.

—"It is my painful duty, madam," he said, "to inform you that lightning has just struck your husband."

"Did it strike him more than once?" she asked anxiously.

"No, ma'am."

"Thank Heaven it's no worse!" she said, with a sigh of relief; "If lightning only struck John once, he'll pull through."—*Puck.*

CHOLERA IN SOUTH AMERICA.

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A study of the development of cholera, during the past summer in the Argentine Republic, Uruguay and Chili, should convey some useful lessons to the people of the United States. Not being a physician, I cannot speak with any authority regarding the causes of its appearance in the various localities; nor as to the efficiency of the measures used in its treatment. I have found it exceedingly difficult to get correct information as to the dates of its first appearance, the number of cases, and number of deaths, in the different towns. But the approximate data, which I give, convey an adequate idea of the severity of the epidemic, and the remarkable rapidity with which the disease traveled.

Cholera was undoubtedly brought to the Rio de la Plata by the Italian emigrant steamer "Perseo." This vessel anchored off Buenos Ayres on October 12th, 1886; and rumors of the existence of cholera on board had been telegraphed from Montevideo two days previously. One of the leading daily papers of Buenos Ayres contains the following in its issue of October 13th, 1886: "The 'caso sospechoso' steamer Perseo is in the roads in quarantine. All the alarm about her is moonshine. The deaths on board were of babies a few months old, and of an old fellow of 70, who is, we hope, better off in the next world."

This ill-fated steamer was intended to carry about 1000 passengers, whereas 2017 had been packed on board on this trip. Unfortunately for all the populous towns and fair villages, afterwards devastated by the dread disease, the "Perseo" arrived at Buenos Ayres just at the time when the inaugural festivities of the new President of the Republic, Dr. Celman, were taking place. And a still greater misfortune than the crowded condition of her steerages was the presence in the cabin of the "Perseo," of a prominent Argentine politician, who had been to Italy upon some diplomatic mission. This gentleman could not conceive that 22 deaths from cholera in the steerage during the passage was any reason why he should be deprived of the pleasure of being present at the inaugural ceremonies. It seems as necessary for politicians to keep an eye to windward, with regard to future advantages, in the Argentine Republic, as in the United States. The gentleman's political friends pulled the

proper wires, and the great man was relieved from quarantine, and allowed to land and dance at the inaugural ball. Immediately, the other cabin passengers, with great reason, urged that they had been no more exposed to the cholera than the politician, and should, therefore, also be allowed to go on shore. Their request was no sooner granted than the passengers in the second cabin advanced the same arguments. The final result was, that at the end of three days, a large number of the passengers from the "Perseo" were wandering through the streets of Buenos Ayres. On October 15th, the paper previously quoted, remarked: "There is considerable uneasiness in the public mind about the 'Perseo's' passengers being allowed to land after three days' quarantine."

On October 20th, two sailors died on board a Government vessel anchored in the Riachuelo, and while it was quite certain that these were cases of cholera, the attempt was made to attribute their deaths to other causes. The Riachuelo is an anchorage, which has been made by dredging the mouth of the river of that name. The part of the city, extending along this water front, is termed the "Boca;" and is a low, swampy place, without drainage and with numerous pools of stagnant water. The filthy residents of the Boca are principally Italian and Spanish sailors' families, and the usual human birds of prey who live at the expense of ignorant sea-faring people. They are crowded together in miserable huts, without ventilation; and their drinking water is full of putrescent animal and vegetable matter. The water of the Riachuelo is, in fact, so bad that it kills all the fish that enter this river which, does not, however, prevent the poorer classes from using them as food.

A large number of the steerage passengers of the "Perseo" naturally drifted at once to the Boca; and there is little doubt but that suspicious cases began to appear there immediately afterwards. The facts were suppressed, however, until about November 3d, when several cases daily began to be reported. The attending physicians still insisted that it was not Asiatic cholera, but only "colera nostra" or English cholera.

On November 6th, twelve suspicious cases were reported at Rosario, a city of 50,000 inhabitants some 200 miles up the Parana river. As there are numerous steamers plying constantly between Buenos Ayres and Rosario, it is probable that many of the "Perseo's" passengers were carried to that place. On November 7th, ten deaths occurred at Rosario, and a number of fatal cases in the

Boca at Buenos Ayres. The city authorities now began to awake to a realizing sense of the danger; and a large force of men was employed to cleanse the Boca and other offensive districts. All of the vessels were ordered from the Riachuelo to the outer anchorage, some miles distant. When a case of cholera was reported, the house was at once isolated, and no one but the physicians either allowed to enter or depart. Disinfectants were lavishly used, and finally many of the huts in the Boca, with their contents, were burned. During the remainder of the month of November, there was a daily average of 7 or 8 deaths. The wealthier inhabitants fled in all directions, and, as a consequence, the epidemic was soon reported at distant points, and invariably on the direct line of travel.

By December 10th, twelve or fifteen cases daily were reported at Cordoba, a city of 40,000 inhabitants on the Central Argentine R. R., 246 miles from Rosario and 430 miles from Buenos Ayres. The same day it made its appearance at Mendoza, on the Andine R. R., some 650 miles west of Buenos Ayres. By December 13th, it had traveled southward along the Great Southern R. R., 450 miles to Bahia Blanca, and northward along the Great Northern R. R., 800 miles to Tucuman.

When the cholera was first reported at Buenos Ayres, the Republic of Uruguay shut off all intercourse with the Argentine, and established a military cordon along the frontier, while numerous boats were kept patrolling on the river. No persons, merchandise or even letters were permitted to enter. But notwithstanding the most vigilant precautions, by means of small boats on dark nights, some individuals from Buenos Ayres undoubtedly managed to reach Montevideo. On December 5th, the authorities of the city gathered up all the vagrants about the streets, and placed them in the poor-house at La Union, four miles distant. On December 8th, six cases of cholera were reported at this institution, and the disease gradually spread throughout the city in defiance of the most rigid precautionary measures. As Montevideo has an excellent situation, and is well paved and drained, with a healthful water supply brought from a distance of some thirty miles, the energetic government managed to curtail the ravages of the disease. In a population of over 100,000, there were not more than seven hundred deaths, and the disease disappeared by March 1st, 1887.

Thus we find, that in about one month after cholera was acknowledged to exist at

Buenos Ayres, and in less than two months after the arrival of the emigrant steamer "Perseo," the epidemic had spread along the existing lines of travel to the limits of the Argentine Republic, viz.: 450 miles to the southward; 800 miles to the northward; 650 to the westward, and had reached Montevideo, 100 miles to the eastward.

During the month of December, the cholera was raging in almost every town in the Argentine. The freaks of the epidemic were apparently very strange. A low-lying city of 400,000 inhabitants, like Buenos Ayres, with exceedingly unhealthy wards, where the population was crowded together in miserable hovels, and no sanitary laws were observed, should have been a congenial locality for the disease. But there had been only five hundred deaths from cholera in this city up to January 1st, 1887; while in Rosario, with one-eighth the number of inhabitants, over one thousand fatal cases had occurred. Tucuman, with its 30,000 people, has an admirable situation on a table land, near the Sierra Aconquija, in the northern part of the Republic. Yet within about two weeks after the first appearance of the disease there, over two hundred people died in a single day. This terrible result may be partly charged to inefficient measures of treatment, and to the ignorance and bigotry of the people. When the health authorities made an attempt to destroy the fruit in the place, they were attacked by a mob and four of them killed. The ignorant "gauchos" even believed that the physicians would poison any one taken sick with choleraic symptoms. It is related that one virago, from sheer bravado, in the presence of the doctors, broke open and ate a watermelon and drank copiously of the water against which they were being warned. In four hours she was a corpse.

At Mendoza even more frightful scenes were enacted. This city has about 25,000 inhabitants; is delightfully situated at the foot of the Andes, some twenty-five hundred feet above sea-level, and is reputed to have the healthiest and most enjoyable climate in the world. In 1861 the town was entirely destroyed by an earthquake, when 13,000 people perished. The new Mendoza is built quite near the site of its ill-fated predecessor. It is regularly planned, with wide well-paved streets, and numerous shade trees. The city is kept very clean, and the houses are substantial and well built, while even the peasantry reside in neat, vine-clad cottages. The people are comfortably clad, and healthful food is cheap and abundant. A canal drawn from the river Mendoza traverses the city

and irrigates the vineyards and gardens. The average death-rate in this model city has been only 15 per 1000. Yet, within a week after the appearance of the dread disease, the people were dying at the rate of fifty per day. Its existence was first reported December 13th, and on Christmas day there were over one hundred deaths. The inhabitants were panic stricken, and fled in all directions. It was estimated that more than one-half the houses were vacated. The dead were left unburied and the sick unattended, until, at last, the convicts in the prisons were given their liberty for assisting in throwing in and covering the bodies in a huge ditch constructed for the purpose. The dead were found everywhere scattered over the hills and plains, wherever the dread disease had attacked them. During the height of the epidemic, almost every case was fatal. This same result was noticed in many of the smaller towns, where the medical assistance was insufficient. Locomotives were finally sent to Mendoza, and all the water used was boiled. This seemed to have a good effect in checking the ravages of the disease, as was also found the case at Tucuman.

During the month of December the temperature at Buenos Ayres ranged above 90° Fahrenheit on many days.

When cholera was first reported at Buenos Ayers, the Government of Chili adopted a rigid non-intercourse policy against the Argentine and Uruguay. A military blockade was established at all the passes of the Andes, and steamers that had touched at Montevideo or Buenos Ayres were not even allowed to communicate with the shore upon arrival at Valparaiso.

The cholera was at its worst stage in Mendoza during the last week of 1886. This city is situated near the entrance of the two passes in the Andes generally used in the intercourse between the Argentine Republic and Chili. By the Uspalatta Pass it is two hundred and fifteen miles from Mendoza to Santa Rosa, the end of the railroad in Chili. It usually requires six days' travel on mule-back to accomplish this journey. By the more difficult Portillo pass it is less than two hundred miles from Mendoza to Maypu.

Christmas Day the epidemic culminated in Mendoza, and the following day there were four cases and one death at San Felipe, over two hundred and fifty miles distant in Chili; and December 27th, there were twelve cases and eight deaths. On these same days a heavy rain-storm had passed over Mendoza and the Uspallata Pass, and spread over the province of Aconcagua, in which

San Felipe is situated. The cholera rapidly spread throughout this province, and on January 12th, seventy-seven deaths were reported.

At the first appearance of cholera in the province of Aconcagua, a close military cordon was formed around Santiago, the capital city of Chili, and all ingress was practically stopped. Santiago has about 175,000 inhabitants, and a better site for a city could hardly have been chosen. It is situated at a considerable elevation above the sea, in the centre of a plain surrounded by hills. The air is pure and dry, and a large mountain stream flows through the city. The streets are broad, well paved, and are kept very clean. The wealthier inhabitants of Chili have congregated there; and have magnificent houses and grounds and live regardless of expense. Notwithstanding all these conditions apparently unfavorable to it, the cholera appeared in the suburbs on January 21st and soon spread throughout the city. It also appeared almost simultaneously in the small villages of the surrounding province. On February 18th, there were one hundred and eleven deaths in Santiago, and by April 1st, there had been about twenty-five hundred victims to the disease. Valparaiso also attempted, by a cordon, to prevent the entrance of cholera on the land side. But although this and other precautions may have delayed its march, it no less surely appeared about the middle of February.

By March 1st, 1887, the cholera had apparently run its course in the Argentine and Uruguyan Republics, and at the beginning of April no more cases were reported. A few cases daily still continued to occur in April, at Santiago and Valparaiso, Chili; but the disease has practically suspended operations, until the hot weather of next December may cause it to break out again with renewed activity.

The useful lessons, from the cause of this dreadful epidemic in South America, are readily gathered. Because of the neglect of proper quarantine regulations at Buenos Ayres, these countries have lost thousands of their inhabitants, and all business was completely paralyzed for several months. The development of the Argentine Republic has been delayed at least one year, and great fear exists as to the future; for their experience of epidemics has led them to believe that the second season is worse than the first.

After Asiatic cholera has once obtained a foothold in any populous country, it seems quite impossible to prevent its spreading. If any Italian emigrant ship should introduce it into New York, it would speedily appear at

Chicago and St. Louis. The cholera germs can be carried in a thousand unsuspected ways, and it is even probable that the atmosphere may be the medium of conveyance for considerable distances.

It is quite evident, then, that the National Government should institute a strict quarantine, if not positive non-intercourse against those countries where the disease is epidemic; for all the seaboard cities of the United States cannot be trusted to observe the rigid precautions which are absolutely necessary. Let a single city neglect its duty, and the inhabitants of the entire country will surely be the sufferers. And even if the quarantine laws of the United States prove effectual as to the coasts, there remains the positive danger from Canada and Mexico.

The precautions observed in the Argentine, Uruguay and Chili, to check the ravages of the disease after it had appeared, were very much the same as have been used in other countries, viz.: special hospitals, rigid isolation of houses where there have been cases, profusion of disinfectants, destruction of all articles that have been in contact with patients, boiling of all water used for drinking, abstention from all fruits, especially watermelons, and careful inspection of all other food.

THE EYE OF THE ADULT IMBECILE.

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The following observations and conclusions are based upon the examination of the eyes of twenty young adult male imbeciles seen at the State Hospital for the Insane at Norristown, Pa., and are given as a contribution to the subject of the significance of the local conditions so generally found in adolescent and young adult eyes which are the victims of asthenopia, and are undergoing changes in refraction.

During the examination the following precautions were observed:

First. Care was taken to exclude all but the proper class of subjects.

Second. Subjects chosen whose eyes were free from extraneous disease or inflammation.

Third. Young adults were used.

Fourth. Males were taken.

Fifth. Every subject was submitted to the same routine examination.

¹ Abstract of a paper read before the American Ophthalmological Society, July 21st, 1887.

Observations.

Subjective.

First. Direct vision for form, as a rule, normal.

Second. Accommodative action: impossible to obtain any reliable result.

Third. Visual fields: nothing could be gotten

Fourth. Color perception probably normal.

Objective.

Fifth. Pupils generally relatively equal in size, but frequently opposed to each other in their long diameters.

Sixth. Irides equally, though sometimes sluggishly mobile to light-stimulus, convergence and accommodation.

Seventh. Extra-ocular motion intact in all directions; slight insufficiency of the interni found in one-half of the cases.

Eighth. Optic disc seemingly healthy; more so than would be expected for age.

Ninth. Physiological excavation frequent; usually small, shallow, oval in outline, and occupying a position slightly to the temporal side of the centre of the disc.

Tenth. Scleral ring as a rule visible all around disc, and slightly broader to the outer side.

Eleventh. Pigment massings beyond scleral ring generally limited to narrow concentric splotchings and double loops, with undisturbed areas beyond and between.

Twelfth. Entire absence of the so-called absorbed *conus*.

Thirteenth. Fibre-layer of the retina but very slightly increased in thickness.

Fourteenth. Very few lymph reflexes and opacities of vascular sheaths.

Fifteenth. Retinal vessels about normal in comparative size, and in a few instances carrying impoverished blood.

Sixteenth. No change in the choroid, except a somewhat granular condition, more pronounced in macular region; this sometimes being accompanied by a slight absorption of epithelium (especially amongst the most intelligent).

Seventeenth. Almost equal degrees of H., with slight amount of As. present in every case.

Eighteenth. Absence of any congenital external or internal gross local malformation.

Nineteenth. The less imbecile the subject, the more common were the ordinary conditions seen in the used eyes of the mentally healthy.

It must be remembered that these observations do not hold absolutely good as written in every individual case, each subject presenting different degrees of the main features expressed in seemingly due proportion to amount of intelligence and consequent use of eyes for continued near-work. They merely show what should be expected in an average case, and thus serve to express the type.

Conclusions.

First. The present study tends to show that the adult eye of the imbecile is an organ which is capable of proper functional activity, and that the want of action is in the main due to what may be termed intellectual hebetude.

Second. By reason of mental incapacity which has supervened in such subjects before the eye has been brought into continued and constant action as an instrument of accurate and delicate use, the ordinary appearances seen in the used eyes of the mentally healthy are lessened in due proportion to the amount of work given to the organ.

Third. The want of these physical changes, presenting a picture almost identical to the one seen during infantile existence, may be considered as typical of an unused, healthy, adult, human eye.

Fourth. The healthy eye of the adult imbecile, therefore, serves to teach us that the various conditions known as insufficiency of the interni, dirty red-gray appearance of the optic-disc, irregularity of physiological excavation, non-visibility of the superior and inferior portion of the scleral ring, absorbing conuses in all of their varieties, increase in density and thickness of the retinal fibres, opacities of vascular lymph-sheaths, disturbed states of the choroid, and gross errors in astigmatism with changes in indices of refraction, which are so frequent in the used eye of the mentally healthy, must be considered as pathological changes, expressive of low inflammatory action, with stretching and distortion from increased intraocular and extraocular pressure; these being representative not only of general want of tone so often seen amongst those of sedentary life, but of constant and frequent abuse of a delicate organ.

1507 Locust Street.

—A colored man who had been bitten by a rattlesnake claimed to have been cured by whiskey and an application of raw chicken-flesh. It is hard to tell which had the power to effect a cure; but the colored race and the chicken draw pretty well together.—*Puck.*

HELONIAS IN UTERINE HEMORRHAGE.

BY A. NOEL SMITH, M. D., OF DOVER, N. H.

In the evening of the 26th of February of the present year, Mr. H. called at my office to consult me in regard to the condition of his wife, and gave me the following history:

Three weeks previous she had miscarried, between three and four months, this, having been her fourth pregnancy, but first miscarriage. The foetus alone was said to have come away at that time—nothing like a placenta, and very little hemorrhage. Indeed, the next evening she attended a concert, and for several days moved about quite a little, both walking and riding. Soon, however, hemorrhage came on, at times being quite profuse. And up to the date of the husband's coming to me there had been nothing which they were at all sure was placental in appearance. Without seeing the patient, I prescribed ext. ergot fld. gr. xx. t. i. d., and enjoined quiet.

March 1st, no better; made a visit; constant flow from uterus, but quantity not large; os very slightly dilated; no presentation of membranes; there being no rise in temperature, no chill, and no symptoms of septic poisoning, thought it not advisable to open up uterus.

Gave the following, continuing ergot:

R. Acidi gallici.....	3j
Syr. simp.....	f 3j
M. deinde adde	
Aquæ cinnamom.....	f 3 iv
Aquæ puræ.....	f 3 iij
M. S.—	Tablespoonful every four hours.

Ordered, also, vaginal injections of hot water, nightly; after this, until April 11th, some little improvement, but still constant drain.

May 2d, patient discouraged, and nearly as bad as ever, yet not confined to bed. All former treatment was suspended, and she was given pil. quin. sulph. (gr. ij), one three times daily. As the result of this there was very slight improvement for four days, but not a day passed without considerable hemorrhage.

May 22d, prescribed Mist. Helonin Co. (Schlotterbeck), one teaspoonful four times daily. This mixture is composed of the resinoids, helonin, senecin and avenin. My patient had been taking this preparation four days, when I was summoned to the house to attend another member of the family; and I was both surprised and glad to be informed

that with the administration of the helonias there had been a marked improvement, until now, there was no flow whatever. Continued the same remedy daily, and, June 10th, the patient menstruated regularly for the first time since before impregnation. Flow continued five or six days, ceased, and at this writing there has been no recurrence of hemorrhage.

Now, although there was no *positive* evidence of placenta coming away in this case, yet I am inclined to the opinion that the uterus was emptied before I saw the patient, there remaining an intractable case of menorrhagia to deal with. The hemorrhage ceasing as it did does not seem to me a mere coincidence, as the agents usually depended upon to control it were faithfully tried, with little or no effect. Then the helonias mixture came to the rescue, the result being only what has from time to time been claimed for it.

SOCIETY REPORTS.

NINTH INTERNATIONAL MEDICAL CONGRESS, WASHINGTON, 1887.

TUESDAY, SEPTEMBER 6TH (*continued*).

Section on Anatomy.

Dr. L. H. Dunning read a paper at the morning session upon "The Anatomy and Surgical Importance of the Peri-renal Cellulo-adipose Tissue and Renal Capsule." He found this to lie in the fact that these tissues are subject to inflammation and morbid changes. He thought all loose portions of fat should be removed, and, in general, every tissue that is too vascular.

Dr. Oppenheimer, of Richmond, Va., read a paper upon "An Apparatus for the Treatment of Fractures of the Surgical and Anatomical Neck of the Humerus." This apparatus was a sort of iron cage which was to be fastened around the chest with plaster of Paris.

At the afternoon session, the address of the President, Dr. Wm. H. Pancoast, was delivered. Hespeke of the great advances which had been made in microscopical anatomy, and then referred to the anatomy of the joints. He also mentioned some anomalies of muscles that he had observed, and declared his opinion that deep fasciæ were ligaments as well as protectives.

Dr. Albert B. Strong, of Chicago, Ill., then read a paper upon "Frozen Sections of the Male Pelvis, and the Anatomical Relationship of the Pelvic Organs with Especial Reference to Supra-pubic Cystotomy."

Following this paper was one by Dr. F. C. Schaefer, also from Chicago. His paper was upon "Anatomical Points Involved in the Complete Loss of Scalp, Including One Ear and the Greater Portion of the Eyelids." This paper was descriptive of a case in which a girl had been caught by the hair in a factory, and had her scalp torn off. Skin grafting gave him the best results in the way of cure, which he illustrated by photographs. Small grafts seemed better than large, and should be placed close together.

Section on Dental and Oral Surgery.

Dr. Wm. Carr, of New York city, gave a clinical demonstration of the treatment of fractures of the maxillæ with a modified interdental splint. He recommended that an impression in wax be taken, after bringing the parts into as close apposition as possible, and removing loose teeth and splinters of bone. From the wax model, an interdental splint should be made of hard rubber. A space is left in the splint in front of the incisors of the upper jaw through which to give nourishment. The mouth should be disinfected; for this purpose, the author prefers a three per cent. solution of peroxide of hydrogen, or a solution of bisulphate of soda, in the proportion of one drachm to the ounce. The splint, in ordinary cases, should be kept on from three to four weeks.

Dr. E. Brasseur, of Paris, France, then read a paper upon "The Use of Air in Dental Therapeutics," in which he recommended hot air as a germicide.

At the afternoon session, Dr. Junius E. Cravens, of Indianapolis, Ind., read a paper entitled, "The Management of Pulpless Teeth."

After stating that pulpless teeth were not dead, he entered his protest against the use of escharotics, and urged that the pulp-canal should be thoroughly cleaned, and then hermetically sealed with tin-foil.

The paper was discussed by Dr. Thos. Fillebrown, of Maine; Dr. A. W. Harlan, of Chicago, Ill., and Dr. W. C. Barrett, of Buffalo, N. Y., all of whom differed more or less emphatically from the author of the paper.

The next paper was by Dr. T. E. Weeks, of Minneapolis, Minn., upon "Matrices as

Adjuncts in Filling Teeth." He urged simplicity in construction, cheapness and adaptability as the points to be aimed at.

Section on Climatology and Demography.

The address of the President of the section was given in our last issue.

The second paper was by Dr. Charles Denison, of Denver, Colorado, upon "The Preferable Climate for Phthisis." The author recommended a climate found in the United States at an altitude of from fifteen hundred feet in the North in winter, to ten thousand feet in the South in summer. Contra-indications to such a climate are an excitable nervous temperament; valvular lesions, with rapid action of the heart; marked and extensive emphysema; pneumothorax and hydro-pneumothorax; active pneumonia or hæmoptysis; high bodily temperature; extensive involvement of lung-tissue, and similar conditions.

Dr. Jno. Wm. Moore, of Dublin, Ireland, read the next paper on "The Seasonal Prevalence of Pneumonia." The author argued for the belief that pneumonia is an infectious disease, basing his conviction upon its occasional epidemic prevalence, and upon the character of the symptoms, their mode of onset, etc.

Dr. Henry B. Baker, of Lansing, Mich., also read a paper, entitled "The Relations of Certain Meteorological Conditions to Acute Diseases of the Lungs and Air-passages." The author stated that cold air is always dry air, and that diseases of the air passages are caused by this cold dry air abstracting moisture from the tissues over which it passes.

Section on Therapeutics.

Dr. Hugh Hamilton, of Harrisburg, read a paper upon "The Chemical Philosophy of Remedy." He quoted Jaksch as saying that "remedy may be defined as the use of means to restore the body to healthy condition by prophylaxis"—repair of injury and the correction of nutrition. He argued for the employment of antiseptics in modified form in internal medication.

Dr. Ralph Stockman, of Edinburgh, stated that a ptomaine was obtainable from phthisical sputum which was capable, when injected into mammals, of producing progressive emaciation; but that opium and belladonna, administered after this alkaloid had been injected, had power to stay the disease, so that the animal recovered.

The next paper was by Dr. J. S. Sinclair Coghill, of Ventnor, Isle of Wight, England.

Its title was "Chlorate of Potash." The speaker claimed that this salt liberated its oxygen to the blood. He also claimed for it tonic and stimulating powers.

Dr. D. F. Phillips, of London, England, then read a paper upon "The Action of Certain Drugs on the Circulation and Secretion of the Kidney." As the result of his experiments, he concluded that the flow of urine was determined not so much by blood-pressure as by the rate of flow of the blood through the renal vessels.

The next paper by S. S. Wallian, of New York, on "The Neglect of Non-Medicinal Therapeutics," was a plea for the abandonment of drugs in favor of baths, massage, electricity and hygiene.

Section on Diseases of Children.

Dr. Moncarvo's paper on "Hereditary Syphilis and Rickets in Brazil," was read. The former furnished sixty per cent. of the cases of infantile disease. Rickets was present in forty-five per cent. of the cases that came under his observation. More than two-thirds of the rickety children show signs of syphilis. He therefore regards hereditary syphilis as an important factor in the production of syphilis.

The next paper was by Dr. Wm. Stephenson, of Aberdeen, Scotland, on the "Rate of Growth of Children." The maximum growth occurs in girls from the eleventh to the thirteenth year, and in boys from the fourteenth to the sixteenth year. He attributes the fact that puberty is a critical and trying time not to the development of the reproductive organs, but to the great activity of growth which then occurs.

Dr. Victor C. Vaughan read a paper on "The Use of Cow's Milk in the Artificial Feeding of Infants." The writer was opposed to the practice of giving milk during cholera infantum. In the discussion that followed the reading of this paper, all of the speakers were alive to the danger that might result from the use of milk, but most of them were accustomed to rely upon some preparation of the milk to render it innocuous.

At the afternoon session, the first paper read was by Dr. Wm. P. Northrup, of New York, upon "The Pathological Anatomy of Laryngeal Diphtheria as Related to Intubation."

In autopsies of children who had died after having worn the O'Dwyer tube from three to seven days, there was found only an abrasion of the superficial epithelium, until the occurrence of an epidemic of measles, in which many deaths occurred from complications. He found the cause of death had been mostly

extension of pseudo-membrane to the bronchi, and pneumonia.

Three papers followed upon Intubation of the Larynx. The first was by Dr. E. Bouchut, Paris, France; the second by Dr. Joseph O'Dwyer, of New York; the third by Dr. F. E. Waxham, of Chicago, Ill.

Dr. O'Dwyer concluded that intubation was only a simple operation in an easy case, and when done with dexterity and coolness. Intubation, even when perfected, can never be considered a satisfactory remedy, in view of the complications and nature of membranous croup.

Dr. Waxham was a strong advocate of intubation, but was not blind to its disadvantages; the operation is difficult of performance; the soft tissues may be wounded or the trachea perforated. It is more difficult to withdraw than to insert the tube. The author stated that the operation had been performed one thousand times in two years, and that two hundred and sixty-nine lives had been saved from certain death.

Dr. Jennings, in the discussion that followed, expressed his preference for tracheotomy.

Dr. Pitner questioned the correctness of saying, as Dr. Waxham did, that 249 recoveries meant 249 lives saved, as it is impossible always to tell whether a child will die or not.

Dr. Northrup declared that he had never experienced any difficulty in performing intubation. The only drawback to the operation lay in subsequent feeding of the patient.

In concluding the discussion, Dr. O'Dwyer expressed the opinion that no conclusion of value as to the relative merits of tracheotomy and intubation was possible with the present statistics.

Section in Military and Naval Surgery and Medicine.

The first paper read was by Dr. Robert Reyburn, of Washington, D. C., upon the question, "Are Wounds from Explosive Balls of such a Character as to Justify International Laws Against their Use?" The general conclusion of both the writer and those who spoke upon the question seemed to be that they were. Dr. H. H. Smith, of Philadelphia, mentioned the fact that President Lincoln had suggested that their use be discontinued in the war of the Rebellion.

Dr. Jeffrey A. Marston read an interesting paper upon "Age and Acclimatization of Soldiers in Reference to Service."

The best age for service, at least in India, was between twenty-seven and thirty years. He stated that in India mortality was greatest from typhoid fever. It is most frequently fatal during the hot and cold seasons.

During the first year of a soldier's life he is likely to be attacked with a fatal form of pneumonia. The diseases, in their order of prevalence, are typhoid fever, hepatitis and heart disease.

The discussion which followed the reading of this paper fully endorsed its statements.

Several papers, in the absence of their authors, were read by title.

A very able paper was then read by Dr. Jno. Anderson, of London, on "Heat-Stroke in India."

The speaker referred to the labors of Dr. H. C. Wood, and then proceeded to divide his subject, in accordance with the severity of the disease, into ardent fever, heat apoplexy, and sunstroke. After describing the symptoms of each form, the author spoke emphatically against the use of alcohol, and gave his preference for a drink for soldiers to cold tea with lime juice. For medical treatment, the author highly recommends the hypodermic injection of a neutral salt of quinine. Perfect clearness of the solution is a point to be insisted upon. He had never seen tetanus result from these punctures. The reduction of temperature was difficult to explain. Possibly it arose from the action of the drug upon the cardiac ganglia.

Section in Laryngology.

The first paper was read by Dr. J. P. Klingensmith, of Blairsville, Pa., on "Hay Asthma."

The speaker was inclined to make local irritation, hypertrophies, deflected septum, etc., the starting point, and pollen, etc., exciting causes.

At the afternoon session, Dr. N. Rankin read a paper on "Some Remarks upon the History of Rhinology."

Section in Psychological Medicine.

The opening paper was on "Miliary Aneurisms," by Dr. E. C. Spitzka, of New York. The speaker reported a case in point, and also one of deformity of the brain.

The next paper was upon "Remissions and Intermissions in Insanity," by Dr. Daniel Clark, of Toronto. This paper provoked considerable discussion, for the most part adverse to the author's views.

Dr. Bower, of Bedford, presented the next paper, upon "Occupation for the Insane in Asylums for the Private Class in England." All sorts of general house, garden and farm work were done by the patients. The most suitable work has been copying of legal documents.

At the afternoon session the first paper was read by Dr. Theo. W. Fisher, of Boston, Mass., on "Monomania and Modern Equivalents."

Two papers were then read upon "Classification of Insanity," and one upon "The True Nature and Definition of Insanity." The latter by Dr. Hughes.

Section in Surgery.

Dr. John Homans read the first paper. It was entitled "Three Hundred and Eighty-four Laparotomies for Various Diseases." Among other good results he reported the cure of a case of tubercular peritonitis.

A paper on the question "When is Colotomy justifiable," was read by Dr. I. M. Matthews, of Louisville, Ky. The writer did not consider the operation justifiable when there was cancer three inches from the anus, nor in stricture not in reach of the finger, nor in aneurism, nor in cases of specific origin.

Section in Gynecology.

Thos. More-Madden, M. D., F. R. C. S. Ed., of Dublin, Ireland, presented the first paper, on "The Causes and Treatment of Barrenness." He presented a tabular statement of the causes of barrenness in five hundred and twenty-eight cases of sterility. The most frequent cause was found to be stenosis of the cervical canal. Of those due to this cause he reports the best results in three hundred and eighty cases. He advised cutting and simultaneous forcible expansion of the affected parts, followed by dilatation during the period of cicatrization. He then described the instruments he used for this purpose.

Dr. A. Reeves Jackson then read a paper upon "The Modern Treatment of Uterine Cancer."

The next paper was by Prof. Graily Hewitt, of London, England, upon "The Relations between the Changes in the Tissues and Changes in the Shape of the Uterus." In young women who have been inadequately nourished, there sometimes occurs about puberty a non-inflammatory softening of the uterus. This produces an abnormal flexibility, which in turn permits flexion. When subsequent hardening occurs the flexion is persistent.

At the afternoon session Dr. W. H. Wathen read a paper entitled "Rapid Dilatation of the Cervix Uteri." The writer presented instruments which he considered an improvement upon Goodell's modification of Ellinger's. He is in the habit of using this instrument in his office and dilating the cervix without general or local anæsthetic, to the extent of half an inch, and allows his patient to walk or ride home a few minutes afterwards.

Section in Dermatology and Syphilography.

The papers presented in this section were "Studies in Hirsuties," by G. H. Rohé, of Baltimore, Md.; "A New Method of Treating Diseases of the Skin Locally," by Dr. Valentine Knaggs, of London, England; "A New Method of Treating the Vegetable Parasitic Diseases of the Skin," by Dr. J. H. Reynolds, of Chicago, Ill. Dr. Knagg's paper was a plea for the substitution of emulsions for ointments in the treatment of skin diseases. The former make films and are adhesive and protective. The following is a good base:

B	Paraffin molle.....	3 j
	Pulv. gum. acac.....	gr. clx
	Acid. borici.....	gr. xvi
	Aquæ.....	ad. f 3 j.
	Stir until emulsified.	

Bismuth, zinc and sulphur may be added to this when desired. All lint, etc., should be dispensed with.

Dr. Reynolds's paper gave a very interesting account of the author's method of applying parasiticide lotions by means of a sponge electrode wet in bichloride solution and applied to a diseased area, as in favus or ringworm of the scalp. A one per cent. solution of bichloride of mercury was used. Only three cases had been treated, but the result was encouraging.

Section in General Medicine.

Dr. Josef Koercesi, Director of Commercial Statistics of Budapest, Hungary, read a paper on "The Preventive Power of Vaccination." The paper is a critical study of statistics of vaccination. After very careful analysis, the author finds that the *mortality* of small-pox as distinguished from the *lethality* (by the latter term meaning the liability of those already sick to die) was greater in the non-vaccinated than in the vaccinated by *five hundred per cent.*, and this was due exclusively to the lack of vaccination. No influence of vaccination upon syphilis or tuberculosis was found. In a population like that of the United States, vaccina-

tion would annually save 120,000 lives, while the number of children dying of cutaneous diseases as the result of vaccination, etc., might make 300.

Dr. Whitmarsh, of London, read papers on "Vaccination and Pasteur's Treatment." The first was a plea for vaccination, coupled with an assertion of its dangers, and a statement that sufficient caution was not exercised by the Government of England in procuring proper virus. The second paper was a criticism upon Pasteur's method. He suggested trying Pasteur's method upon convicts, as was done with small-pox fifty years ago, allowing them the choice between their sentence and becoming the subject of experimentation.

Dr. Leale remarked that he had never seen or had reported to him a single case of hydrophobia, though he annually saw many thousand children, hundreds of whom had been at different times bitten by dogs.

Section in Obstetrics.

The first paper was by Dr. J. C. Cameron, of Montreal, Canada, upon "The Influence of Leukæmia on Pregnancy."

The author's case showed an hereditary tendency in the disease. The disease was apt to begin in the latter part of pregnancy. Successive pregnancies occurred during the progress of the disease. An interesting fact was the determination that red-blood corpuscles were lost in the placenta, being in the normal quantity in the placental artery of the child, but diminished in the placental vein.

Professor A. Charpentier read the next paper, upon "Experimental Uræmia." By injecting urea into the blood of gravid animals, he found that death of the foetus occurred before death of the mother.

Dr. W. T. Lusk read a paper upon "The Prognosis of the Cæsarean Section." He thought that the brilliant results obtained abroad were due to the fact that they recognized better the proper time for doing the operation. The author was strongly in favor of Cæsarian section as opposed to craniotomy, even in pelves with a conjugate of three inches.

Dr. M. Säger, of Leipsic, Germany, followed with a paper, which was read in abstract, upon "The Cæsarean Operation." His operation was to be preferred to Porro's when the child was living, and could not be delivered by any other operation; or, when the child was dead, and could not be delivered by craniotomy or embryotomy, or only with extreme danger to the mother.

He attributes the mortality obtained in America to delay.

Dr. W. H. Wathen, of Louisville, Ky., read the next paper, upon "Abdominal Section for Removal of the Foetus." He favored section as opposed to craniotomy.

Section in Otology.

The first paper was read by Dr. T. E. Murrell, of Little Rock, Ark., on "The Peculiarities in Structure and Diseases of the Ear of the Negro." He referred to true negroes, not mixed races. He finds that negroes are less affected by ear troubles than the white races, and that there are marked anatomical peculiarities belonging to their ears. The subject gave rise to quite a diversity of opinion in the discussion.

The next paper was read by Dr. Jno. F. Fulton, of St. Paul, Minn., upon "Primary Inflammatory Disease of the Mastoid Antrum." The disease is extremely difficult of diagnosis, but pain of a stinging, throbbing, tearing character, is apt to be constant. The diagnosis is rendered almost certain if a swelling occurs behind the ear *late* in the attack.

Other interesting papers presented and read were, "Indications for Artificial Opening of the Mastoid Process, and Best Methods for Closing the Same," by Dr. G. E. Frothingham, of Ann Arbor, Mich.; "Inherited Syphilis as a Factor in Suppurative Inflammation of the Middle Ear," by Dr. Robert Tilley, of Chicago; "Cerebro-Spinal Fever as a Cause of Deafness," by C. M. Hobby, of Iowa City.

Section in Physiology.

Dr. W. D. Halliburton, B. Sc., of London, England, read the opening paper, upon "Comparison of the Coagulation of the Blood with Rigor Mortis," in which he pointed out the resemblances between the formation of fibrin and the production of myosin. There were, however, important differences.

The second paper was read by Dr. T. W. Poole, of Lindsay, Ontario, whose subject was "The Necessity for a Modification of Certain Physiological Doctrines Regarding the Inter-Relations of Nerve and Muscle." The author held that spasm or contraction of involuntary muscles occurred not when their motor nerves were stimulated, but when they were cut, paralyzed or dead.

Section in Ophthalmology.

At the Afternoon Session, Dr. A. Mooren, of Düsseldorf, Germany, read a highly interesting and instructive paper upon "The

Simplest Method of Cataract Extraction," based upon an experience of 5,019 extractions since he began practice in 1855. He used boric acid as an antiseptic wash, and cocaine as a local anæsthetic. The cut is made with a Graefe knife downwards, the eyeball being fixed with simple forceps. Abandon friction if the patient is restless, and deliver the lens by gently stroking the eyeball. Subsequent treatment consists of a light dressing fastened with adhesive plaster.

Dr. N. Manolescu, of Bucharest, followed with a paper on "Cataract Extraction without, as Compared with Extraction with, Iridectomy," in which he expressed the opinion that the combined operation was more trustworthy.

In the discussion that followed a good deal was said with regard to the propriety of the simple or combined operation. The general opinion seemed to be that no rule in regard to the matter could be laid down.

Surgical Section.

At the afternoon session, abdominal surgery was first under discussion. Subsequently, Dr. Donald Maclean, of Detroit, Mich., read a paper on "Three Cases of Surgical Disease of the Kidney with an account of Operations performed for their relief, the Complications which arose, and the Results." He reports these cases with two recoveries and one death, the latter a baby 22 months old.

A paper by Sir Thomas Longmore, on "The Advisability of Providing Soldiers in Service in the Field, with some Form of Preliminary Dressing for Wounds," was read in abstract by Dr. Marston.

The author stated that a preliminary dressing for wounds was supplied now to the German soldiers, and had been in use in the British army since the Crimean war. He recommends a dressing of his own device as compact and complete.

A paper on the same subject by Esmarch was read by Dr. Stern, of Philadelphia.

Dr. Neudörfer's paper on "The Present Standpoint of Antisepsis and the Best Mode of its Application in War," was read by title.

Next on the list came a paper by Dr. B. A. Watson, of Jersey City, on "Primary Treatment of Gunshot Wounds." The writer advised the removal of all foreign matter from the wound, and then the occlusion of the wounds of entrance and exit with aseptic bandages.

The following papers were also read:

"The Importance of the Government Securing and Preserving Vital Statistics in the Army and Navy for the Benefit of Subsequent Applicants for Pensions," by Eli A. Wood, Pittsburg, Pa.; and the "Importance of International Regulations for the Medical Treatment of Prisoners of War," by D. S. Lamb, Washington, D. C.

Section on Laryngology.

Dr. Lennox Browne, of London, read the first paper upon "Recent Views as to the Pathology and Treatment of Tuberculosis of the Larynx."

In the early stages of the disease high attitudes by the sea or in a piny region are of the greatest importance. Inhalations of turpentine (vaporized), oil of eucalyptus and menthol are useful.

At the Afternoon Session, a paper for special discussion was read upon "Recurrent Hemorrhages of the Upper Air-Passages," by Dr. Wm. Porter, of St. Louis, Mo.

The next paper was one by Dr. W. E. Casselberry, of Chicago, on "Treatment of Laryngeal Papillomata." If the tumor is small, forceps are best. For large tumors, curette followed by cautery is used.

Dr. E. L. Shurley, Detroit, Mich., gave an abstract of his paper on "The Diagnostic Differentiation of Recent Tuberculous, Specific and Rheumatic Laryngeal Diseases."

The next paper was one upon "Chronic Rheumatic Laryngitis," by Dr. E. F. Ingals, Chicago, Ill. Treatment is by astringent and cleansing sprays, and internal use of alkalies or aromatic oils.

The last paper was read by Dr. A. B. Thrasher, of Cincinnati, Ohio, upon "Resorcin in the Treatment of Nasal Catarrh." He claimed for resorcin the same results as for cocaine, but without loss of the normal functions.

—A citizen of Gainesville, Ga., whose pet cow suddenly showed symptoms of going dry, consulted a cow doctor, who decided that she had the "hollow tail," and split the tail, inserted a quantity of salt and turpentine and bound it up. Going out the next day to see how the cow was getting along the owner caught a half-grown pig, which he had kept in the same lot, busily engaged in sucking the cow, and this accounted for the falling off of milk. He at once took the bandage off the unfortunate cow's tail.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Initial Symptoms of Tabes Dorsalis.

On account of the extraordinarily great importance that is accorded to the diagnosis of tabes dorsalis in its earliest possible state, Karger (Inaug. dissert. Berlin, 1887) has set himself the task of studying with particular diligence the initial symptoms of the disease. For this purpose he made use of the rich material of Mendel's polyclinic, and investigated 117 cases which he observed there, of which number he communicates 70 of the most characteristic in a table at the conclusion of his thesis.

The following are the author's results in detail:

1. The diagnosis of tabes offers but few and uncertain persistent points; although a very frequent etiological connection exists between tabes and syphilis. The author could establish with certainty the previous existence of syphilis in 53 per cent. of the cases.

2. *Disturbances of sensibility* are characteristic of the incipient stage. These are lancinating pains, next paresthesias of all kinds, such as the feeling of numbness, especially in the lower extremities, and the girdle-sensation; further, slowness of perceiving sensations and Romberg's symptom, which is of especial significance and can be pretty constantly demonstrated. This, however, the author marks as an anomaly of sensibility, not as a symptom of ataxia.

3. *Disturbances of vision.* Diminution of the sharpness of vision, concentric contraction of the field of vision, amblyopia, amaurosis, depending upon atrophy of the optic nerve (35 per cent. of the cases); further, slight transient but returning paralysis of the ocular muscles, which, according to the muscles concerned—oculo motor, abducens, trochlear (rarely)—lead to different anomalous positions of the eye. Very characteristic is the reflex rigidity of the pupil in 66 per cent. of the cases, conditioned in part by paralysis of the sphincter and in part by

4. *Reflex disturbances.* The author comes to the remarkable result that the patellar reflex, which has been noted as absent pretty nearly without exception, was preserved eight times in his one hundred and seventeen cases and therefore preserved oftener than other statistics show. Of other reflex disturbances there are to be noted: Diminution of the

bladder reflex—chronic disease of the bladder without palpable local disease should awaken suspicion of tabes—diminution of the sexual reflex (impotence), while the abnormal increase of these visceral reflexes belong to the rarities. Other rare symptoms are gastric and cephalic crises, tabetic diseases of joints.

The author comes to the conclusion that complaints of a vague kind, such as nervous pains, troubles on the part of the visual apparatus or of the bladder, in no way justify the physician in making the diagnosis of tabes; but that they must continually challenge him to an accurate investigation of other tabetic symptoms, inasmuch as the characteristic objective symptoms, such as loss of the patellar reflex, Romberg's symptom, reflex rigidity of the pupil, cause no subjective troubles. In conclusion, the author cherishes the proper belief that in an early diagnosis, the chances for rational medical treatment and its successful result, are much more favorable.—*Allgemeine med. Central-Zeitung*, August 3, 1887.

Affections of the Heart in Tabes Dorsalis.

Among the manifold visceral complications which not rarely attend typical tabes dorsalis, and which seize upon nearly all parts of the viscera with peculiar nervous attacks (crises), Leyden of Berlin thinks those that effect the heart are ordinarily the least studied and described. Nevertheless the heart and its nerves remain by no means unaffected.

In spite of the relatively frequent association of valvular affections with tabes dorsalis, according to the author it is not quite possible to assume an intimate connection between the two, and to regard the first as an atrophic shrinking process affecting the valve. Both diseases are of themselves much too frequent to permit such a conclusion. Of greater interest according to the author, are the heart affections hitherto only rarely observed, which Leyden has already mentioned in his article upon tabes dorsalis in Eulenberg's *Real Encyclopædia*, and in addition to which he has since had opportunity to make some further observations.

These attacks are characterized by oppression in breathing, and pain, and a feeling of anxiety that arise and disappear suddenly. They bear an indisputable resemblance to angina pectoris; they can therefore be referred to a neuralgic participation of

the vagus nerve. As in general all paroxysms arising in tabes affect sensitive and sympathetic nerves, so also these attacks of the heart-nerves have a different intensity and duration. These attacks in question are extraordinarily violent and can even be accompanied with such danger as to threaten life.

Basing his conclusions upon reported observations (for which see the original), the author holds that in the course of tabes dorsalis the heart is affected by attacks which are analogous to the gastric, laryngeal, and bronchial crises. They arise with painful paroxysms of changing violence. The complex of symptoms evidently corresponds with angina pectoris. The sufferers go about with pain in the neighborhood of the heart which not rarely radiates into the left arm. With this is joined a feeling of oppression in the breathing, at times a high degree of anxiety, suffocation, a feeling of annihilation, as well as vertigo, faintness, and often irregularity of the pulse during the attack.

From its connection with tabes dorsalis, it is to be concluded, according to the author, that we have to do with neuralgic attacks within the sphere of the heart-nerves, and therefore with nervous angina pectoris, which with Romberg, can be called neuralgia of the heart. Although the symptoms are not very violent they can connect themselves with threatening failure of the heart. Leyden thinks it cannot be easily explained how this arises, inasmuch as sufficient findings of autopsies are not yet in existence. In a case of Vulpian's (*Revue de Méd.*, 1885, page 60) there were no striking post mortem phenomena recognizable in the heart. But that the vagus nerve can be attacked by the degenerative process, is proved particularly by the investigations of Oppenheim, who found this nerve markedly atrophied in a case attended by violent gastric crises. But according to the author, it could be suspected that such a profound degeneration of nerve fibres must call forth not only gastric crises but also cardiac attacks, especially since Oppenheim mentions that gastric crises are attended by severe pain in the præcordium and pains radiating into the left arm. In Vulpian's case, the attacks connected themselves with angina pectoris just as gastric crises do. Also other symptoms that are concerned with the cardiac nerves in gastric crises are observed, even the sensation of præcordial pain, and acceleration and irregularity of the pulse. In the author's cases, cardiac attacks are proved to occur independently of gastric crises.—LEYDEN. *All gemeine med. Central-Zeitung*, July 30, 1887.

The Curability of Tabes Dorsalis.

Babinski, chief of one of Charcot's wards, has made a communication to the *Société de Biologie*, which apparently shows recovery from tabes. Most neurologists, among whom we may mention Leyden, Rosenthal and Hammond, seem to be very sceptical in regard to the possibility of recovery, or even improvement, in this disease. On the other hand, Strümpell and others admit, at least, that pauses may occur in its development. Brown-Séquard shares this opinion, and goes still further, for he admits the possibility of a cure. Babinski rests his opinion on three observations, one of them with an autopsy.

The first case was that of a male of 39, who came under Charcot's care in 1875. Charcot made out typical tabes, and sent him to a bath (Lamalon). The patient took the cure for ten successive years, with an evident improvement after each season. In 1885, the patient had as remaining symptoms only very mild and infrequent attacks of pain, and has continued to the present time in this condition. In the second case the patient, a physician, began at the age of 35 to notice shooting pains in the legs, which increased in severity, and made it necessary for him to give up practice. In 1871, three years after the first symptoms appeared, he consulted Duchenne and Charcot. Both pronounced the disease tabes. The condition became worse until 1881, from which time an improvement made itself manifest, and in May, 1887, he had as remaining symptoms only infrequent radiating pains, absence of tendon reflex and a small hyperæsthetic spot.

The third patient, in 1852, at the age of 38, was affected by diplopia, lasting several weeks. Then weakness appeared, and the patient suddenly went blind six months later. At the same time lancinating pains appeared. In 1869 the patient, a female, was admitted to the Salpêtrière. Atrophy of the optic nerves, severe gastric crises and pains in the upper and lower limbs were made out, but no incoordination of the gait. In 1876, the presence of Westphal's phenomenon was recognized. In 1878 the lancinating pains and gastric crises had disappeared, but the blindness persisted. In 1886 the patient died of pneumonia.

Examination of the nervous system showed that in the lumbar region the posterior columns were sclerosed, especially the parts lying nearest the meninges. The medullary fibres were much less numerous than normal. The pia mater was thickened in the neighborhood of the posterior columns. In the dorsal

region sclerosis affected the columns of Burdach and Goll. In the cervical cord sclerosis predominated in the column of Goll, but spread to some extent in the adjoining tissue. In the posterior columns the number of medullary fibres was much reduced, and in the optic nerves they had almost disappeared, there being little left besides connective tissue and blood vessels. The autopsy, therefore, proves the diagnosis of Charcot, who had repeatedly demonstrated the case as one of recovery from tabes ("extinguished tabes").—*Deutsche med. Wochenschr.*, No. 28, 1887.

Ointment for Impetigo.

Liebreich recommends the following:

- R. Acid. salicyl. gr. xv
 Pulv. zinci oxidi. gr. clxxx
 Pulv. amyli. gr. clxxx
 Lanolin. 3vj

M. For local use.

L'Union Médicale du Canada, July, 1887.

Typhus Bacilli in the Blood.

The results of investigations of the blood for typhus bacilli have been contradictory, but Ruetimeyer approaches the question with the employment of all necessary caution. The blood was taken from the spots of the eruption. Of six typhus cases, one in the first week and five in the second, sixteen original cultures were made from thirteen different spots by about fifty-five punctures, and were put into test tubes; fifteen of the original cultures remained sterile and only in one culture from two punctures there developed itself in the course of some days, a small grayish spot, which the microscope showed to consist of bacilli, showing the character of typhus bacilli. These results are of general interest, but for diagnostic purposes can only apply to a few cases.—*Deutsche Medizinisch-Zeitung*, August 8, 1887.

The Bark of Condurango in Diseases of the Stomach.

Condurango has been considered for some time as endowed with remarkable properties in cancer of the stomach. A work by Dr. Riess, in the *Berlin. Klin. Woch.*, tends to relieve this remedy from the discredit into which it had fallen.

Supported by a great number of observations, the author declares that both the painful symptoms in diseases in which cancer of the stomach had been positively diagnosed, and even confirmed later by autopsy, have been removed by the use of condurango, and

that other affections of the stomach with a train of symptoms proper to cancer have been sensibly relieved, indeed even frequently cured. By the daily employment of 150 grs. of condurango continued for some months the appetite is seen very shortly to be improved, nausea and vomiting diminished or even cured, pain notably relieved or gone altogether, the strength and weight of the patient increased.

In all the cases the duration of life has been lengthened and in some the improvement has been so marked that the patients have been able to leave the hospital, considered as cured.

The changes which have been produced under the influence of the remedy upon the tumors in the stomach which have been accessible to palpation, have been especially remarkable. In a total of sixty-four cases, a sensible diminution of the tumor could be demonstrated seventeen times; in eight other cases these disappeared completely or nearly so, and in the other cases the tumor ceased to increase in the same proportions as formerly.

The use of the bark of condurango seems worthy of commendation in these cases. The author prescribes the decoction—150 grs.—f3vj, to which five drachms of syrup are added.—*Revue Médicale*, June 1887.

Book Reviews.

Bar's Antiseptic Methods in Obstetrics. Translated by Henry D. Fry, M.D. Published by P. Blakiston, Son & Co., Philadelphia. Price, \$1.75.

Dr. Paul Bar is accoucheur to and was formerly interne in the Maternity Hospital, Paris.

While antiseptic midwifery has been much written about in the last few years, it is probable that the greater portion of general practitioners do not yet realize its importance. The primary object of the physician is to save and prolong life. Manifestly, any method of practice that will tend to insure life to the life-giving mother is a great blessing to the nation.

The author devotes the first few chapters to a discussion of the germ theory in its relations to the puerperium, and to the most effective agents in combatting sepsis. The rest of the book is taken up with a discussion of the proper procedures in different obstetric operations. The chapter devoted to antiseptics in catheterization seems particularly good, though the whole book is readable throughout, and is full of useful information.

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N. A. RANDOLPH, M. D.,
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ACCIDENTS IN PRESCRIBING.

In another part of this number of THE REPORTER we mention the case of a physician who has been, and perhaps is yet suffering distress and anxiety from the suspicion that he has made a mistake in prescribing which led to the death of his patient.

As the story is told, he gave a grain of morphine to a young man, with directions how it should be taken. The patient took the whole at a dose, and died. The doctor, who is now the sole survivor of the interview, says he charged the patient to put the powder in twelve spoonfuls of water and to take one spoonful of the mixture at intervals until he felt drowsy.

So far as this case is concerned we do not for a moment doubt the statement made by the physician. It is incredible that any medical man should give a comparative stranger a whole grain of morphine at a dose; and the method of repeated moderate doses is in such general use that the physician's account of the directions is the only one which seems probable.

None the less—it may be because of facts which we have not learned—the doctor we refer to is believed by some in his community to have made a mistake in directing how the morphia was to be taken, and the death of the patient is charged to him.

This unfortunate circumstance illustrates one of the perils to which medical men are exposed. Engaged in one of the most arduous occupations to which men can be devoted, with risks to their health, risks to their families, and risks to their property, they are continually subject to grave risks to their reputation. Suspicion and accusation of mistake and even of wrong doing is no uncommon portion of their lot. Doubtless physicians do make mistakes. Doubtless sometimes a weary man, worn with the laborious duties of his profession and exhausted with loss of sleep, perhaps anxious about the care of his family, does order one drug when he intends another, or a large quantity when he means a small one. But how rarely does this happen. The wonder is that it does not happen oftener, and that, if it happens, it should be regarded with so little charity.

There are, however, mistakes made through carelessness, and when this occurs to a physician he is no more to be excused for the consequences of his act than is any other careless man.

A third class of mistakes is due to misunderstanding. These mistakes are not hard to prevent, and ought not to occur. A few prudential measures, if practiced habitually, would probably secure this result. We will call attention to three simple rules which may prove useful if habitually followed:

1. Always inform a patient when it would be dangerous to take the entire quantity of a prescription at a dose.
2. Have the word

"POISON!" marked on the label of every prescription which would be dangerous if the whole were taken at a dose. 3. When drugs which may be dangerous are given or ordered, write directions instead of giving them verbally.

We recommend these precautions to our readers, and would be glad to give publicity to any others which their ingenuity may suggest.

THE UTILITY OF INTESTINAL ANTISEPSIS.

Dr. D. N. Kinsman has published an interesting paper in the *Journal of the American Medical Association* in which, on scientific grounds, he urges the utility of antiseptics in various intestinal complaints. Summing up the results of the researches of Bouchard and Damaschino, he attaches great importance in the pathology of intestinal affections to the phenomena of fermentation and putrefaction of which the intestinal canal is the seat, and of which the principal agents are certain micro-organisms. Products such as indol, skatol, phenol, divers ptomaines, are the result of the action of bacteria. The meconium of new born babes does not contain them, nor are they met in the normal discharges of nurslings. The urine of the newly born, and of infants nursed exclusively at the breast contains no indican; but as soon as the babe is fed on a mixed diet, then the numerous bacilli appear in their stools, and indol and indican in their urine. These bacilli, which are the cause of putrefaction, engender poisons which are normally destroyed, or stored up in the liver, excreted by the kidneys, and even by the intestines. When from any cause the functions of the liver are interrupted, the bile no longer being poured into the intestine and exerting its antiseptic action, these toxic products of bacillary elaboration (ptomaines) augment in the alimentary canal and poison the blood. The action of mercurials, which heretofore has not been well understood, is now made plainer in the light of these facts; they evidently play an antiseptic rôle, in arresting morbid fermentations and destroying bacteria. They also neutralize the ptomaines, and thus prevent self-poisoning, and by their

cholagogue effect on the liver they indirectly have the same result. In answer to the question: "How may one determine the necessity for intestinal antiseptics?" the writer remarks, that one indication is the presence of indican in the urine.

Dr. Kinsman in pursuance of his inquiries in this direction has made a series of experiments on the discharges of patients affected with cholera nostras and cholera infantum. He has invariably found in these stools enormous masses of bacilli, and the examination of the urine revealed the presence of indican. The green discharges of infantile catarrh of the intestines also contain bacteria is abundance, and here Dr. Kinsman's observations agree with those of Professor Hayem, who however claims to have isolated the specific bacterium which causes the green discharges.

It is worthy of note that the success which attends the antiseptic treatment of these intestinal affections—and the markedly bactericide agents such as creosote, resorcin salicylate of soda, corrosive sublimate seem to be more and more coming to the front in the therapeutics of intestinal ailments—confirms the views which have above been stated.

—A Health Department wagon, carrying a barrel filled with a solution of bromine, was driven along the excavations, and the chemical was sprinkled upon the upturned earth from large sprinkling cans. Mr. Bayles, President of the Board of Health, was present at 9 o'clock yesterday morning when the operation was in progress, and expressed himself as much pleased with the result. The odor of the mixture is rather pleasant, and it at once neutralized the bad smell from the dirt. At Twenty-seventh Street and Broadway, where some particularly foul earth lay exposed, a double dose of the disinfectant was applied, with the result that the offensiveness was wholly removed. The smell from the dirt is simply that of the gas which has escaped from the pipes, and which the pavement held imprisoned in the ground. Although several people complained of headache from inhaling it all day, it is not considered as very unhealthy. Several applications of the chemical were made during the day, and everybody was gratified at the marked change for the better.—*New York Sun*, August 18th.

NOTES AND COMMENTS.

Pachydermia Laryngis.

[The deep interest which has been aroused in the disease affecting the throat of the Crown Prince of Germany, must be our excuse for giving to the readers of the *REPORTER* a more extended description of the affection than that contained in the last issue.]

In opening his paper (read before the Berlin Medical Society) Professor Virchow remarked that it would ill become him to omit mention of the fact that his discourse was occasioned by the serious illness of the Crown Prince, which had so largely engaged public attention during the past few months. After alluding to his early studies of the anatomy of laryngeal growths, he described the boundaries of the pavement epithelium of the pharynx, as it extended upon the laryngeal structures; referring especially to the broad strip of pavement epithelium which passed over the region between the two arytenoid cartilages, and is thence continuous without interruption upon the vocal cords to their anterior extremities. He remarked that these sections of the larynx covered with pavement epithelium, when compared with portions of the digestive tract, showed a type approaching the cutaneous cells; that their characteristics were more or less cutaneous or dermoid. This was especially shown in the continuity of the flat epithelium of the skin, as it extended through the mouth into the respiratory and digestive tract.

The processes which form the objects of interest in this epithelial tissue partake largely of the character of chronic inflammation, in the course of which two morbid processes are especially noticeable, viz., *a.* localized swelling, generally limited to a single point; *b.* diffuse swelling. Both are excessive epithelial proliferation; in the first the cells do not change their type, but greatly increase as dermoid cells; in the second a diffuse proliferation of the superficial connective tissue, rather than of the epithelium, takes place. Both processes Virchow names pachydermia; the limited or localized form he terms "wart" pachydermia, or pachydermia verrucosa.

As a characteristic appearance on examination he finds at the posterior extremity of the vocal cord, where the processus vocalis of the arytenoid cartilage passes beneath the mucous membrane, at its emergence, a flat, oval swelling, which extends generally ob-

liquely from behind and above downward and forward beneath the border of the vocal cord. These bodies are symmetrical, and are not the scars of former ulcers, but epithelial layers closely adherent to the subjacent cartilage, and probably undergoing an erosive-like process. In addition to this there is a diffuse process which extends over the entire surface of the vocal cords, and consists of a superficial layer of grayish, thick material, which is made up of epithelial cells. Microscopic examination reveals a papillary structure covered with epithelia. A further extension of the disease is found in the inter-arytenoid spaces; this occurs, however, infrequently. In this condition an important feature is the occurrence of masses of hardened fissured tissue called rhagades, resembling the hardened portions of cutaneous callus. By the movements of the parts these masses wound the surrounding tissues, producing the appearances of cancrioid ulcers. He does not believe that an actual change into cancrioid occurs.

The most salient point of warty growths upon ordinary examination, is found at the middle and anterior portion of the vocal cords, and in the anterior angle where the vocal cords meet.

The best described form of pachydermia is that in which the papillary element is least well marked, the growth consisting of epithelia only. Such growths are generally called papilloma, a name which Virchow considers an absurdity; he shows how it is equally applicable to various tumors, and wishes that it was rejected from the literature as meaningless.

The essential characteristic of papillary proliferation in the larynx he considers to be the proliferation and hardening of the epithelial elements. Epithelioma is a much more appropriate name for the growth, which should be subdivided into hyperplastic and heteroplastic.

The diagnosis is difficult, and it can only be determined by anatomical examination whether the growth is heteroplastic or cancerous, or only superficial epithelial proliferation. The latter consists of a growth of the epidermal epithelium, amidst which the papilla grows. Such symmetrical growths are often found in connection with nests of epithelial cells. According to Virchow, the verrucosities of the larynx are of epithelial nature, and were formerly called condylomata, but this name is now reserved for another form of tumor. Another gross error in the classification of these growths has been in calling them fibromata; when sections are

properly made it will be found that in no instance does the connective tissue proliferate into the epithelium, but the growth is an epithelial proliferation. It is not difficult, by proper section, to study carefully the development of these tissues from nuclei, and from such observations the conclusion is reached that the disease pertains to the epithelium as such. Polyps may possess some of the characteristics of these growths, but not their combined peculiarities.

Virchow sums up his description as follows: In a certain portion of the larynx, caused by irritation similar to that which exists on the external skin, two kinds of proliferation may occur which resemble chronic inflammation; one produces a warty growth, and one a diffuse, even swelling, which attacks the entire superficies. These resemble markedly the warts and diffuse swellings produced by irritation of various sorts upon the integument, causing a local increase of tissue. (In illustration of the differential diagnosis of these growths, specimens of lupus and papillary cancer were exhibited.)

Virchow's criterion of distinction between the papillary wart and the papillary cancer is the absence or presence of epithelial elements in the connective tissue. He considers all growths benign in which the normal demarcation remains at the base of the epithelial layer. Every trace of epithelium in the connective tissue he considers suspicious. When he finds beneath the boundary line of epithelium spaces filled with epithelial masses, then he recognizes the distinctive characteristic which stamps the formation as cancerous.

Betol—A New Anti-rheumatic Remedy.

The substitutes for salicylic acid and its salts, which are continually increasing in number, appear to have received an important addition in the introduction of a salicylic ether of naphthol, which has been recommended by Sahli, who, our readers will remember, likewise introduced salol into the therapeutics of rheumatic affections. To this substance Sahli gives the name of betol, and like salol, which divides into salicylic acid and phenol, it splits up in the organism into salicylic acid and naphthol.

Betol appears to possess the advantage over salol in freedom from odor and taste. It contains, however, ten per cent. less salicylic acid than salol, and has likewise the disadvantage of possessing a much higher melting-point (203°F. , instead of 109°F.),

a point which is of importance, since the readiness with which such compound ethers split up into their component parts is dependent upon the lowness of their melting-point.

The conditions under which this remedy may be applied do not yet seem to be clearly established, since Sahli states that while he has in numerous cases of articular rheumatism, neuralgia, etc., employed betol with most successful results, in other cases its use has been followed by no improvement. In the latter instances, examination of the urine has shown, by the absence or faintness of the salicylic acid reaction, that the preparation did not become decomposed, as it must do to produce any therapeutic effects. Betol is readily soluble in fluid fats, and Sahli recommends the administration of this substance in solution in oils, with the hope of facilitating its decomposition, since it is known that the melting-point, and therefore the point of decomposition, is lowered by the presence of certain organic bodies.

Kobert, in the preceding number of the same journal, has likewise published a paper on this subject, in which he, almost without qualification, gives the preference to betol over salol, especially in its freedom from disagreeable after effects. Sahli regards this position as, however, not yet proved. He has given betol in amounts varying from 15 to 180 grains in the twenty-four hours, the latter in a six year-old child. In some instances he has found the most marked effects from the smaller dose, while in other cases the larger amounts have appeared entirely inert. He therefore thinks that in our present imperfect knowledge regarding this substance, betol cannot yet take the precedence over salol on account of its smaller percentage of salicylic acid and its more difficult decomposition; so, also, the substitution of the inactive naphthol for phenol is to be regarded as a disadvantage, since the action of salol is not to be attributed solely to the salicylic acid but also to the phenol, which especially appears to be of value in the treatment of neuralgia. Nevertheless, on account of the freedom from disagreeable odor and taste, betol appears to be well worth further study to establish the conditions in which it is of value and to determine the correct method of its administration.

Kobert, who describes this preparation under the name of naphthalol, found it very useful, and at least as valuable as other medicaments, in various forms of catarrh of the bladder, especially in gonorrhœal cystitis,

with alkaline decomposition of the urine. The urine soon became clear and acid, the formed elements in it were diminished in number, and the pains of the patients became easy.—*The Therapeutic Gaz.*, Aug. 15, 1887.

Glioma of the Retina, Convulsions, Extirpation of the Eye, Death.

Dr. Wood gives the following account of this case in the *North Carolina Med. Jour.*, August, 1887.

Mistakes in diagnosis, if thoroughly recognized and investigated, are capable of yielding valuable lessons to the practitioner. I have overcome my hesitation in making this case public, because I believe its narration may serve to teach the important lesson in diagnosis which I learned by it:

O. S., a boy not quite $3\frac{1}{2}$ years of age, was brought to me for an eye trouble. The cursory examination I was permitted to make of the little patient, who had become peevish by frequent attempts to see his eye, revealed what I took to be glaucoma. The upper lid was prominent and slightly red, having the appearance of ptosis, but still under control of the patient. The globe was hard, but not stony hard, as described in absolute glaucoma. The interior chamber had the reflex of a glaucomatous eye. There was a great amount of constitutional disturbance and the patient was anæmic, and his appetite exceedingly capricious.

The history of the case as obtained from the mother was that when the child was eighteen months old, while at play, it was seized with a sudden pain in its eye, and came running to her saying he had "got some snuff in his eye." She examined it, but did not discover any snuff. The pain passed off in a short time, or at least he was easily pacified. It was not long after this occurrence that a relative visiting the house remarked upon the peculiar appearance of the child's left eye. As he said he "could look deep down into the eye—there was a small clear spot in it." This was about August, 1883, two years after the first symptoms were noticed.

The father of the child was not willing to have an examination made at the first visit, and he returned to his home leaving the impression on my mind that I had absolute glaucoma to deal with, and that nothing better could be promised than an iridectomy of the remaining eye.

On Tuesday, 5th February, 1884, seven months after he was first seen by me, the patient was brought again to me, a dis-

tance of ten miles. Shortly after his arrival he was taken with convulsions of a most violent character, as described by the friends present. I saw him two hours later, and, learning the condition of the patient from the messenger, I secured the assistance of my friend Dr. W. J. H. Bellamey, who kindly visited him with me. We found him in a state of coma. His lips were cyanotic and covered with frothy saliva; his complexion was cadaveric; his pulse was small and very rapid; his breathing labored. Temperature in the mouth was found to be 99° F. The left upper lid was perceptibly prominent; there was a hemorrhagic stain of the lower edge of the sclerotic; death seemed imminent. A hasty examination led us to the conclusion that the life of the child was threatened by the pressure of the globe, and extirpation was decided upon.

Chloroform anæsthesia was attempted, but the breathing was so irregular that it was found impossible and unnecessary. Artificial respiration had to be kept up during the operation. There was the usual amount of hemorrhage, which was encouraged. After the extirpation was completed the breathing improved and so continued until it became normal in a few hours. The justice of the operation on therapeutic grounds was thus demonstrated.

A few months after, the orbit refilled, and the growth was removed, the cavity being well filled with chloride of zinc paste, and treated for several days. The fatal ending was thus delayed only a few months, the parents of the child declining any further efforts to destroy the growth.

The history of this case covers a period of about three years.

Vaginal Hysterectomy.

The *N. Y. Med. J.* (July 30, 1887), publishes the following correspondence, which explains itself:

In an article on "Vaginal Hysterectomy," by Dr. A. P. Dudley, published in your journal for July 9th and 16th, credit is given me for three operations of complete removal of the cancerous uterus *per vaginam*, with one recovery. I desire to add to this number two cases in which I operated on February 2d and 23d, 1887, with recovery; also a third, in which I operated on the 19th inst., which has thus far progressed so favorably that I have no reason to doubt that the patient will recover. I am induced to ask you to publish this note partly because I wish to

place my improved results on record (six cases with four recoveries), and partly because I feel compelled to differ with Dr. Dudley in his recommendation of the lateral posture with Sims's speculum as the best for the operation. My last three operations were performed with the patient in the dorsal posture, the uterus being removed *in situ*, according to the methods of Fritsch and Leopold, with modifications to suit the case, perineal and lateral retractors being used only at the beginning of the operation, and occasionally later on. The duration of the operations did not exceed an hour and a half, and the recoveries were uninterrupted. I am convinced that increased familiarity with the technical details of this operation will enable us to achieve as good results, so far as immediate recovery is concerned, as are reported by Fritsch (60 cases with 7 deaths) and Leopold (48 cases with 3 deaths). Had I then been as familiar with the details of the operation as I am now, and had I performed it then in the dorsal posture, I am confident that I should not have lost my second and third patients, who died of shock from concealed hemorrhage, the Sims's speculum having hidden the bleeding points.

PAUL F. MUNDE.

In a paper read by Dr. A. Palmer Dudley at the third meeting of the Alumni Association of the Woman's Hospital, and published in your Journal for July 9th and 16th, entitled "Vaginal Hysterectomy in America," there is one statement that is misleading. In speaking of the extirpation of the uterus by abdominal section, Dr. Dudley says: "As early as July 25th, 1853, Dr. Walter Burnham, of Lowell, Mass., operated by this method, and was followed in August of the same year by Dr. Gilman Kimball, of the same city." This naturally conveys the idea that Burnham was the first successful operator and entitled to the credit of the same. This is contrary to fact. To Dr. Gilman Kimball belongs, and has been given, the credit of having been the first to operate with success after a correct and clearly determined diagnosis had been made. The case occurred in Vernon, Conn., and the operation was performed on September 1st, 1853, for the removal of a uterine fibroid. It was in every way a success, the patient being fully restored to health. A full history of the case was published in the "Boston Medical and Surgical Journal" in May, 1855. The case reported by Burnham and one reported by another operator in a neighboring city were cases of *mistaken diagnoses*. An operation

was undertaken in each case for the removal of an ovarian tumor, but resulted in the removal of a uterine fibroid, and in one case the operator did not know he had removed a fibroid until he was told so by a pathologist to whom it had been sent for examination. The accounts of the cases were published and widely distributed, but for some mysterious reason the error in diagnosis was not mentioned.

I will mention a few of the leading men who give the full credit of the operation to him to whom it belongs. Koeberlé, of Strassburg, in a pamphlet on "Extirpation of the Uterus," describes the case of Dr. Kimball as the first successful one on record. Bantock, of London, in an exhaustive article in the *British Medical Journal*, after reviewing the whole subject, unhesitatingly gives the credit of having been the first to operate successfully in this line of surgery to Dr. Gilman Kimball, of Lowell. Baron von Langenbeck, of Berlin, speaks of this case as having no precedent in surgical literature. Keith, of Edinburgh, also ascribes to him the full credit for priority in the operation. In a paper by Dr. T. G. Thomas, of New York, published in the *American Journal of Medical Sciences*, in 1876, reviewing the progress made in gynecology in this century in America, in speaking of the procedure, the author says: "In 1853 the first operation was performed in this country for this purpose by Kimball, of Lowell, the tumor weighing six pounds, and the patient recovering. Kimball has, thus far, performed ten operations, with four recoveries and six deaths." It is thus seen that the most eminent authorities, both at home and abroad, place the credit where it rightfully belongs, and it does not seem as if any one who knows the true history of the operation will presume to question the correctness of what is now acknowledged by the highest authorities on the subject.

IRA J. PROUTY.

Legal Responsibility for the Use of Forceps.

The following case tried before Mr. Justice Cave, at Guilford, England, July 21st, 1887 (*British Medical Journal*, August 13, 1887), is of striking interest in this connection since it explains an important medico-legal question and shows the difficulties which must attend this character of medical litigation.

In the case in question action was brought to recover \$2500 damages for alleged negligence, unskillfulness, and misconduct of the defendants in their treatment of the plaintiff's wife in and about her confinement.

The plaintiff, one Gibson, alleged that he engaged the defendant, Jeffries, to attend his wife in her confinement and that Jeffries negligently directed the defendant, Hills, to attend her; that Hills did not exercise a reasonable degree of skill or care and was guilty of gross neglect and unskillfulness in conducting the delivery, whereby the plaintiff's wife was seriously hurt, wounded and mutilated.

Hills alleged that the labor was difficult and that after waiting a reasonable time, and finding the pains ineffectual and the head jammed in the pelvis, he, having obtained the husband's sanction, proceeded to deliver by the forceps. He did so, considering her condition was one requiring such assistance to effect delivery. The perineal rupture was unavoidable and was not caused by any neglect on his part. To repair the wound he had inserted three or four catgut sutures and had given proper directions to the nurse to keep the patient quiet afterwards. On the fourth day after delivery Hills handed the case over to one Chapman, another assistant of Mr. Jeffries. Chapman gave evidence to the effect that he assumed charge on the fourth day; that he found the perineum deeply lacerated and the wound in a very bad state. He considered the forceps had been used too early in the case and too continuously, without giving the parts time to recover themselves, and that during the delivery the perineum ought to have been supported by the hand.

Mr. Jeffries witnessed that he had frequently engaged Hills before as his *locum tenens*, and that he had always given satisfaction.

Dr. Graily Hewitt stated that the plaintiff's wife had consulted him about the injury to her perineum four months subsequent to the birth of her child. He found the perineum had been torn, the injury extending into the rectum. Dr. Hewitt refused to operate upon the case when he learned that an action for damages had been commenced by the patient and her husband. Dr. Hewitt expressed the opinion that as to the forceps being used at the proper time, no opinion could be given unless after examination of the condition at the time; it was for the practitioner to judge of that. His further testimony was corroborated as to the correctness and skill of Mr. Hills' management of the case. The learned judge in summing up the case observed that medical practitioners were expected to bring to bear a reasonable degree of skill and care, otherwise they became liable.

The evidence showed that Chapman had quarreled with the defendant, Jeffries, and

his testimony was impeached. Three medical men, witnesses for the defence, alleged that it was impossible for them to say, unless present at the time of labor, whether instruments were properly used or not; and that to form a judgment on this point the state of the patient must be known and considered. The judge virtually instructed the jury to bring in a verdict for the defendants, which was accordingly rendered as follows: "For the defendants, but we think there was not sufficient medical supervision over the nurse in the after treatment."

It was shown by the evidence that Mr. Hills had failed to inspect the perineal wound and had left its attention to a nurse. As he resigned the case on the fourth day into Chapman's hands one may question whether the subsequent neglect was not as much attributable to Chapman as to Hills.

The case is instructive from several standpoints. *First.* The plaintiff denied Mr. Jeffries' right to employ a substitute in the management of the case, especially one less skilled than himself. *Second.* Whether the careless use of the forceps is not just ground for legal action. We think it is. *Third.* Mr. Hills was somewhat remiss in duty in not carefully closing the perineal tear.

Is it not incumbent upon the obstetrician to promptly discover the extent of this lesion, to confess the same and to attempt its repair by primary union? We think so. It was shown that the plaintiff had greatly suffered in health and in loss of money in consequence of this perineal wound. She was permitted to bear the results of a lesion which might have been corrected if not prevented by skillful treatment. According to the evidence the jury could not do justly otherwise than find for the defendants, but it seems to us at this distance from the case that the plaintiff had good ground for instituting a suit for damages.—*Maryland Med. Jour.*, Sept. 3d, 1887.

—How to cut glass with a pair of scissors is not new, but may be of interest to our readers. According to the "Pottery Gazette," glass may be cut under water with great ease, to almost any shape, by observing the following directions: The glass must be kept quite level in the water while the scissors are applied; and, to avoid risk, it is better to perform the cutting by taking off small pieces at the corners and along the edges, and to reduce the shape gradually to that required. The softer glasses cut the best, and the scissors need not be very sharp. —*The Western Druggist*, August, 1887.

CORRESPONDENCE.

Dentistry for the Country Practitioner.

EDS. MED. AND SURG. REPORTER :

Dear Sirs: In reply to the question which you have asked, how great a knowledge of dentistry a country practitioner should have, I cheerfully write the following, which seems to me to cover the most essential points:

The doctor, in either the city or country, should know when to lance a child's gums. This knowledge is by no means as easily mastered as is generally supposed.

In the first place, the time at which the teeth normally appear should be perfectly known. Then, when a child begins to drink and cries without any obvious cause, or has its bowels or stomach obstinately deranged in such a way as to defy treatment, the practitioner should lance thoroughly over the position of the expected tooth. The moment the enamel emerges from its bony bed and begins to press the gum upward, the stretched tissues should be severed at once in order to relieve the tension. The gum will grow together, but should be cut again as soon as the child shows any tendency to relapse into the condition marked by the symptoms previously stated. If this be done frequently, the gums will not become inflamed, and the operation will be attended with almost no pain. The mother of the child, who is with it constantly, with a little education will be able to tell when the time for lancing has come much better than the doctor. And what is more, she will be one of the firmest advocates of lancing it if it is done in the first instance at the proper time, as she will see her child transformed, in a few minutes, from a crying, feverish, restless baby to a quiet, restful infant. When the gum is bulging it is rather late for the operation, but the lancet should nevertheless be used at once. The cusps of the molar teeth can often be felt low down on the side of the gum shortly after they have protuded from the alveolar process, although the eye is able to detect nothing. The gum over the molars and canines should be lanced with a double cut diagonal to the line of the gums. The gums should receive a single incision directly over the incisors, which cut should in all cases extend directly to the tooth substance.

The practitioner should also know how to cure tooth-ache. To do this, he must know that tooth-aches are divided into two great classes.

First, those caused by irritation of the nerve of the tooth proper, and *second*, those caused by hyperstimulation of the nerves in the structures adjacent to the root. The first class can be cured in the course of half a minute by the use of the proper medicaments in ninety-nine cases out of a hundred. Oil of cloves, carbolic acid, tincture of aconite, creosote, chloral, camphor, cocaine and a number of other remedies have been used—sometimes one has failed, sometimes another; all are more or less inefficient.

About two years ago Dr. Randolph brought the drug called Lewinin, a petroleum ether extract of Klada Kava, to the notice of the dental profession. A ten per cent. solution of this, made with chloroform, acts in a manner similar to cocaine, but much more rapidly. At that time Dr. R. was kind enough to present some of it to me, and since then I have never failed to cure a tooth-ache of the first named class immediately by its use. If Lewinin is unobtainable, and it is quite expensive and difficult to get, cocaine would better be tried. The irritant which causes the tooth-ache of the second class in almost every case is gas generated in the pulp-chamber, which is forced into the structures around the tooth through the apical foramen. If a hole be bored into the pulp chamber with a fine spear-pointed drill, the gas escapes as soon as it is formed and, the irritant being removed, the pain subsides in a few hours. Syringing out the pulp chamber and painting the gum over the roots with strong iodine will hasten recovery. Of course one must be sure that it is a tooth-ache of the second class before applying this remedy. The diagnosis is easy to make. If a jet of ice-cold or very hot water be injected into the cavity and no immediate pain be caused, or, if the tooth is lifted above its neighbor, and hurts when bitten upon, do not hesitate to open the chamber at once; the pulp is dead and gas is being formed. If the water application just mentioned causes throbbing, use the medicaments. If the tooth-ache is still refractory, the desirability of extracting it is to be discussed.

This brings me to the third requirement, namely, that the doctor should know how to extract teeth. To do this in a satisfactory way he must have a knowledge of their anatomy and that of the adjacent structures, and a good set of forceps. The method of extracting teeth is not very difficult to learn, and may be summarized in the following way: If the blades of the forceps are not pushed well up there is danger of fracturing

the tooth. The upper incisors, upper and lower canines are removed by a twisting and vibratory movement. The lower incisors and all the bicuspid, with the sixth and twelfth-year molars, are to be detached by a simple outward and inward movement. The forceps should be forced far up on the roots of the tooth, which should be thoroughly loosened before its removal is attempted. The upper sixth and twelfth-year molars should receive the outward movement first, in order that the palatine root may be loosened at once. The upper wisdom teeth are the easiest teeth to extract, and are extracted by one outward and backward movement. The extraction of the lower wisdom tooth is most difficult. It is usually removed by an outward and backward twist.

But after all, these directions, which are like the alphabet to every dentist, are very crude. It is necessary to feel the tooth and take it out in the direction where the least resistance is offered. Yours respectfully,

JOSEPH HEAD, M. D., D. D. S.

Medicine in Iowa.

EDS. MED. AND SURG. REPORTER:

Here in Iowa it is remarkably healthy just now, and these sweltering hot days find me getting lazy. In a recent number of the REPORTER is recorded a case of heart disease in the treatment of which I can see nothing remarkable except a display of good sense. I wish to report a case not because there is anything new in treatment, but to keep the case fresh in my mind as one that can be very promptly relieved by a proper medication, not by any new methods, but upon principles old and time honored:

Mr. W., aged 63, an Irishman of temperate habits and no family history of note, always a hard worker, for forty years a railroad employé, of late years a section foreman, about a year ago noticed that he was more weary than usual after his day's work, and later that his breath was getting shorter upon any unusual exertion. About a month ago I was sent for where he was at work, about ten miles from my office. I found him sitting up, breathing short, countenance anxious, face dusky, pulse 120, heart impulse weak. He had been unable to lie down at night for several nights. A doctor had seen him and said he had asthma, and prescribed for him, but with no relief; he had no fever, tongue furred and appetite poor; bowels constipated. A physical examination showed effusion in pericardium and in left pleura; no

oedema of feet and ankles as yet. He wished to be brought to the town in which I lived, where he could have better care and proper treatment, and I only prescribed some palliatives until he could get there. The next day I found beginning oedema of legs, all other symptoms intensified. I began treatment as follows: *R.* Calomel, grs. x; sodæ bicarb., grs. v; and in four hours to have a pill of elaterium, $\frac{1}{2}$ gr. every six hours until free and thorough purgation, and in the course of twelve hours the action of the bowels was decidedly brisk. Then the following: *R.* Inf. digitalis, \mathfrak{z} viii; pot. acetat, \mathfrak{z} s. M.—A tablespoonful every six hours. The elaterium was repeated every other day, and the digitalis mixture continued. On the third night after treatment was begun he could lie down and sleep all night, and has done so ever since. His appetite returned, and he gained strength steadily, and now there is no sign of oedema nor effusion in any of the serous cavities; his heart is acting strongly and steadily, and he takes no medicine except some laxatives. In cases of dropsy from heart disease, I have seen the most wonderful results with treatment on this line. In such cases we see the triumph of scientific medication. The tools are sharp and keen; if we know how to wield them the results will be very gratifying to both patient and physician.

St. Ansgar, Ia. A. D. BUNDY, M. D.

EDS. MED. AND SURG. REPORTER:

Dear Sir:—In a report in the *Public Ledger*, from your journal, you say that when a druggist fills a prescription, "just look over and lay down a quarter."

Now when you say "the chances are that the drugs in the prescription don't cost over a dime," you overlook the item of labor. The labor must be skilled under penalty of the law, and is worth remuneration. The rule adopted where I am employed is to charge for labor and use of apparatus at a rate of 50 cents an hour, and to add it to the value of the drugs.

H. F. BACKHUSTON.

Phila., Sept. 2, 1887.

[We are surprised that our amiable correspondent should have found anything but pleasantry in the item referred to.—EDS. REPORTER.]

Dr. Borchheim, a physician with an extensive practice in Atlanta, Georgia, committed suicide September 11, 1887. The cocaine habit is said to have been the cause.

NEWS AND MISCELLANY.

The Gait of a Criminal.

A curious study has been made by Dr. Peracchia of the differences between criminals and law-abiding citizens as exhibited by their walk (*La Riforma Medica*, No. 147, 1887). The author first made a number of observations to determine the conditions of normal progression, and found that in good people the right pace is longer than the left, the lateral separation of the right foot from the median line is less than that of the left, and the angle of deviation of the axis of the foot from a straight line is greater on the right side than on the left.

Comparing these results with those obtained from the study of forty criminals, he found that in the latter the pace was shorter than the normal, a fact which did not seem to coincide with the greater robustness or "toughness" of these individuals. The left pace was longer than the right, the lateral deviation of the right foot was greater than that of the left, and the angle formed by the axis of the foot with the straight line was greater on the left side than on the right. It would thus seem that, in general, the gait of a criminal betrays a marked preponderance of power of the left foot over the right—a true sinistrality. This also agrees with the discovery of Marro that criminals are often left-handed. The moral is, of course, to beware of a left-handed individual, for there is a possibility that he may not be of good moral character.

But this is not all. Dr. Peracchia has not only shown us how we may distinguish criminals in general, but has laid the beginnings of the differential diagnosis between various sorts of evil-doers. The following are the distinguishing characteristics which his observations have enabled him to formulate:

1. *Thieves*.—In those who are predisposed to appropriate the property of others there is a pronounced widening of the base of support, together with a very long step.

2. *Assassins*.—In those who have murder in their hearts the base of support is not as wide as it is in thieves, since the angle formed by the axis of the foot with the median straight line is less obtuse; but the sinistrality betrayed by their foot prints is very marked.

3. *Ravishers*.—Those whose tendencies are in the direction of rape may possibly be detected by a skilled diagnostician by the fact that they take short steps and have no sinistrality to speak of.

These discoveries are of a very interesting character, and if the criminal could be induced to walk before the honest man, instead of following him as he usually does, they might also be put to a practical use, for then good citizens could diagnose the rogue by his tracks, and might thus be enabled to escape robbery, assassination, or rape, as the case might be.—*Med. Record*, Sept. 3d, 1887.

Composition for Removing Ink.

A newly patented composition for the removal and erasure of writing inks or writing fluids from paper, cloth, and all other substances with which writing fluids or inks may come in contact, without injury to the paper or other substance, consists of the following ingredients, viz.: Four quarts of water, four ounces of citric acid, twelve to sixteen ounces of strong solution of borax, three-quarters of a pound of chloride of lime.

In preparing the composition, two quarts of water, which has been previously boiled and cooled, are taken. Four ounces of citric acid are added, and after the acid has been dissolved, six to eight ounces of a strong strained solution of borax are added, after which the whole may be put in a bottle or suitable receptacle. Two quarts of water, which has been previously boiled and cooled, are taken, adding thereto three-quarters of a pound of chloride of lime. The whole is well shaken and left to stand from four to six days, after which it is strained, and from six to eight ounces of a strong solution of borax are added, and the whole is placed in a separate bottle.

When it is desired to remove ink from paper, cloth, or other absorbent substance, the composition in bottle No. 1 is applied so as to thoroughly saturate the place occupied by ink, a blotter being used to absorb all waste moisture. The composition in the second bottle is then applied. By the combined use of the two fluids thus described, writing inks or other fluids will be immediately dissolved and removed from the paper, so that the latter may be again written on.—*Pacif. M. Rec.*, Aug., 1887.

The Crawford County Medical Society.

The trouble in The Crawford County Medical Society, which has existed for the last six years, and which resulted in the expulsion of Dr. John C. Cotton by the Society, has recently been decided in the Court of Equity of Crawford county. The decree of the court reverses the decision of the Medical Courts of the State, and restores Dr.

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Cotton to his membership. The court holds that voluntary associations must be governed by their own laws, which in this case had been violated, in that the Society ignored the action of its own judicial body, which had exonerated the doctor, and proceeded to try the case itself, with a different result.

Cocculus Indicus.

According to Dr. Atkinson (*Virginia Med. Month.*, August, 1887), cocculus indicus is much used to increase the intoxicating power of beer, and the quantity of this adulterant imported into England is really enormous. Commonly, it is understood to be imported from the coast of Malabar for use among the tanners and dyers; but there is a so-called "extract" sold in casks, under the name of "bittern," which is said to be composed of this same cocculus indicus, with extract of quassia to add to the bitterness of the beer, with liquorice to impart color, and sulphate of iron to give an additional froth to the fluid. It is said that the copperas is especially useful in the manufacture of porter, or stout, as giving the peculiar flavor to porter and to half-and-half, when drunk from the pewter pot so common in ale houses throughout England.

Died in a Dentist's Chair.

A case of death in the dentist's chair occurred at Harrisburg, August 29. The victim was George E. Hoffman, bookkeeper for the Foundry and Machine Works, aged 38 years. Mr. Hoffman went to Dr. M. M. Ritchie to have a tooth pulled, and previous to the operation there was administered to him a mixture of chloroform and ether. The operation was about over when Dr. Ritchie noticed that Hoffman's face had grown pallid and his limbs rigid. He placed him on the floor and tried all the remedies at hand, but without avail. Assistance was summoned, but after an hour's work Hoffman breathed his last. Dr. Ritchie thinks he died of brain trouble. A post-mortem examination will be held.

Deceased was a son of the late ex-Sheriff Hoffman and was at one time prominent in the politics of Northumberland county. He served for several years as a clerk in the State Treasury under Robert W. Mackey.

Death from an Overdose of Morphine.

Bristol has been in great excitement for four days over the manner of the death of William Morrow, a respectable young carpet weaver, 23 years of age. Half the town is up in arms, blaming the physician who attended the young man for his death, while the other half are as vigorous in their defense of the doctor.

There is not the slightest doubt but that the young man died from taking a one-grain powder of morphia. He had gone to the physician to get something to make him sleep. It was an overdose, but he was given verbal instructions as to its use. Coroner Silbert held an inquest, which was attended by hundreds. The jury's verdict was: "The jury find that William Morrow came to his death by an overdose of morphia, taken in mistake through a misunderstanding of the physician's directions."

Liability of Physicians.

In a recent case, involving a charge of malpractice, tried in the Supreme Court of Massachusetts, the presiding Judge in charging the jury used the following language: "Whenever men are called upon to act with dangerous agencies, the law holds them to some degree of criminal responsibility. If they are grossly careless or reckless and presumptuous, they are guilty. The same general principle applies to medical treatment. The prosecution must show not merely the absence of ordinary care, but gross carelessness, amounting to recklessness. A man is not to be convicted of manslaughter merely because of his ignorance. His ignorance is only important, as bearing upon the question, whether his conduct in the care and treatment of the patient was marked by foolhardy presumption or gross and reckless carelessness. The defendant is to be tried by no other or higher standard of skill or learning, than that which he necessarily assumed in treating her; that is, that he was able to do so without gross recklessness or foolhardy presumption in undertaking it. It is not necessary to show an evil intent; if by gross and reckless negligence he caused the death, he is guilty of culpable homicide." Accordingly it has been held that a dentist or surgeon using an anæsthetic is not bound to look for any but the probable and natural effects of the drug, and is not liable for results arising from the peculiar temperament or condition of the patient, of which he had no knowledge, although if

this were discoverable upon such an examination of the patient as reasonable skill and diligence require, the dentist or surgeon would be responsible for negligently failing to inform himself.

The fundamental idea on the subject is, where honesty, average intelligence, skill and learning are possessed and are applied to the treatment of the case, with ordinary diligence and caution, the physician is not liable for any mischance that may befall his patient. It is only where he has been culpable that he is liable in damages.

A physician treating a patient in good faith, to the best of his ability, is not criminally responsible for the patient's death, although caused by medicine administered by him; but a person ignorant of the uses and properties of a poisonous drug is criminally liable for the negligent use thereof.—*Hall's Journal of Health.*

A Surgeon's Life.

[From the Autobiography of the late Dr. Gross.]

I have always held that it is impossible for any man to be a great surgeon if he is destitute, even in an inconsiderable degree, of the finer feelings of our nature. I have often lain awake for hours the night before an important operation, and suffered great mental distress for days after it was over, until I was certain that my patient was out of danger. I do not think it is possible for a criminal to feel much worse the night before his execution than a surgeon when he knows that upon his skill and attention must depend the fate of a valuable citizen, husband, father, mother, or child. Surgery under such circumstances is a terrible taskmaster, feeding like a vulture upon a man's vitals. It is surprising that any surgeon in large practice should ever attain to a respectable old age, so great are the wear and tear of mind and body.

The world has seen many a sad picture. I will draw one of the surgeon. It is mid-day; the sun is bright and beautiful; all nature is redolent of joy; men and women crowd the street, arrayed in their best, and all, apparently, is peace and happiness within and without. In a large house, almost overhanging this street so full of life and gayety, lies upon a couch an emaciated figure, once one of the sweetest and loveliest of her sex, a confiding and affectionate wife and the adored mother of numerous children, the subject of a frightful disease of one of her limbs, or it may be of her jaw, if not of a still more important part of her body. In an adjoining room is the surgeon, with his

assistants, spreading out his instruments and getting things in readiness for the impending operation. He assigns to each his appropriate place. One administers chloroform; another takes charge of the limb; one screws down the tourniquet upon the principal artery, and another holds himself in readiness to follow the knife with his sponge. The flaps are soon formed, the bone severed, the vessels tied, and the huge wound approximated. The woman is pale and ghastly, the pulse hardly perceptible, the skin wet with clammy perspiration, the voice husky, the sight indistinct. Some one whispers into the ear of the busy surgeon: "The patient, I fear, is dying." Restoratives are administered, the pulse gradually rises, and after a few hours of hard work and terrible anxiety reaction occurs. The poor woman was only faint from the joint influence of the anæsthetic, shock, and loss of blood. An assistant, a kind of sentinel, is placed as a guard over her, with instructions to watch her with the closest care, and to send word the moment the slightest change for the worse is seen.

The surgeon goes about his business, visits other patients on the way, and at length, long after the usual hour, he sits down, worried and exhausted, to his cold and comfortless meal, with a mouth almost as dry and a voice as husky as his patient's. He eats mechanically, exchanges hardly a word with any member of his family, and sullenly retires to his study to prescribe for his patients—never, during all this time, forgetting the poor mutilated object he left a few hours ago. He is about to lie down to get a moment's repose after the severe toil of the day, when suddenly he hears a loud ring of the bell, and a servant, breathless with excitement, begs his immediate presence at the sick chamber with the exclamation, "They think Mrs. — is dying." He hurries to the scene with rapid pace and anxious feeling. The stump is of a crimson color and the patient lies in a profound swoon. An artery has suddenly given way, the exhaustion is extreme, cordials and stimulants are at once brought into requisition, the dressings are removed and the recusant vessel is secured.

The vital current ebbs and flows, reaction is still more tardy than before, and it is not until a late hour of the night that the surgeon, literally worn out in mind and body, retires to his home in search of repose. Does he sleep? He tries, but he cannot close his eyes. His mind is with his patient; he hears every footstep upon the pavement under his window, and is in momentary expectation of the ringing of the night-bell.

He is disturbed by the wildest fancies, he sees the most terrific objects, and, as he rises early in the morning to hasten to his patient's chamber, he feels that he has been cheated of the rest of which he stood so much in need. Is this picture overdrawn? I have sat for it a thousand times, and there is not an educated, conscientious surgeon that will not certify to its accuracy.—*Washington Star.*

A Court Physician Beheaded.

The Ameer of Afghanistan suffered not long ago from a boil on his neck and sought relief at the hands of his court physician. The latter ordered some sort of a salve to bring the boil to a head. Unfortunately the application caused the august patient considerable pain, and after a night of torture he sent for his physician and had him decapitated. Evidently the physician to the Ameer does not hold a sinecure.—*Med. Record*, Sept. 3, 1887.

Sagacity of a Chemist.

A case has recently been reported in Paris in which a chemist acted with consummate judgment, so much so that it may be hoped that the course of action he adopted upon the occasion will be followed as a precedent by his *confrères* in trade, and be borne in mind and imitated when circumstances seem to require it. A flower girl, smarting under the infliction of being deserted by her lover, who had avowed his intention to marry another woman, made a point of attending the marriage ostensibly for the purpose of disposing of her floral wares. In the midst, however, of the rejoicing after the ceremony she suddenly confronted the newly married pair, and quickly withdrawing a bottle from her basket violently threw its contents into the face of each. A terrible scene ensued, and the worst results were anticipated by the assembled guests, the belief being that the young couple would be blinded for life. Instead, however, of this woeful termination to an auspicious gathering, nothing more dreadful happened than what a pocket handkerchief was amply sufficient to relieve. The fluid, owing to the sagacity of the chemist, was only tinted water. The flower girl, in asking for sulphuric acid, betrayed a demeanor which suggested to the shopman the probable use for which the powerful agent was required, and hence a direful tragedy was frustrated; the faces of two persons still remain unseared, and a woman's revenge, for once, has been unsatisfied.—*Med. Press and Circ.*, Aug. 17th, 1887.

A Splenic Discord.

A ductless gland is the spleen
In left hypochondrium seen.
Oblong and small in size,
Dark bluish-red to the eyes,
But what is its function, I ween?

Parenchymatous body they claim;
Pathologists talk in this strain;
'Tis full of trabeculae.
Reposits the blood, "ye see,"
This anthropological drain.

"Hepar sinistrum," old Galen cries,
"Diverticulum sanguinis," Gray replies.
It's a check on phlogosis
And controls hæmatosis
By the law of osmosis,
Which nature denies.

Quæ manu potissimum curat—amen!!
Was suggested by Celsus, adopted by Senn.
Davaïne found microbes enjoying the spleen;
By Laveran, malarial bacilli are seen.
If we treat by resection this organ—what then??

But malaria, like some venomous snake,
Vents her spleen on this function by shiver and shake.
Malpighian cells, in her humble opinion,
Can't absorb the miasma that's in her dominion,
Unless Rex Quininus takes old Ague Cake.

And so by exclusion, we'll end all confusion,
This gland *surely* aids the digestion.
If a duct could be seen
In some good little spleen,
How soon this would settle the question.

TINNITUS POETICUS ET PRÆTEREA NIHIL.
West. Med. Rep., Aug, 1887.

The Obstetrical Advantages of Otter Tail County, Minnesota.

Otter Tail, one of the frontier counties of Minnesota, bids fair to rival the Rotunda Hospital or the Allgemeine Krankenhaus of Vienna as a resort for aspirants for obstetrical advantages and greatness. Dr. T. G. Hutton, of Fergus Falls, writes us that there are now in that county living quadruplets one week old, living triplets eight months old, living twins born of a sixteen-year old mother, and a child twelve months old whose mother is now only fourteen and one-half years old. It may be added, for the benefit of those who may hesitate between Vienna and Otter Tail County, that the latter place is just as accessible as Vienna, and the cost of living is less. The only reasonable objection to the frontier county is that the vernacular is English; nevertheless, it contains, we believe, a large number of Germans.—*Journ. Am. M. Assoc.*, Sept. 3, 1887.

Diphtheria in a Little Town — Thirteen Deaths in Five Days at Lockport, with 200 Inhabitants.

A large number of people are suffering with black diphtheria at Lockport, a small town of 200 inhabitants on the Pennsylvania Railroad about sixty miles east of Pittsburg. Thirteen deaths have occurred within the past five days.

Recently an old viaduct which formed part of the State canal was destroyed by dynamite at that point, leaving stagnant pools of water, which it is believed, have caused the epidemic. The victims are said to be seized with black vomit, and usually die in two or three days.

ITEMS.

A PHILADELPHIA ADVERTISEMENT.

JOHN BROADBRIM & SON,
BAKERS AND CONFECTIONERS,
Chestnut Street.

Only the finest Chrome Yellow used in our buns.

The Arsenic we put in our Pies is warrant-free from the slightest adulteration.

Our Home-made Bread is carefully baked, and the strychnine which enters into its composition is of the best quality.

All of our Ice Cream is flavored with A 1 Croton Oil. *Give us a call.—Puck.*

OBITUARY.

DR. CHARLES WILLING.

Dr. Charles Willing, a well-known Philadelphian, and the great-grandson of Charles Willing, one of the early Mayors of the city, died on Wednesday evening, August 31, at Tockington, his summer residence, near Jenkintown. His death is said to have been due to nervous prostration. He was born in this city on October 26th, 1805. When a young man he entered the sophomore class of Harvard College, from which he graduated in 1825, graduating later on from the medical department of the University of Pennsylvania. Subsequently he continued his medical studies in Paris, but in after years he relinquished active practice.

Dr. Willing spent a portion of his early life abroad. In 1840 he was married to the daughter of Hon. Joseph L. Tillinghast, of Rhode Island. He took an active interest in many charities, and was connected with

a number of institutions, including Christ Church Hospital, the Philadelphia Saving Fund Society, the Philadelphia Library, and the Pennsylvania Institution for the Deaf and Dumb. He also held several important trusts, and was sole trustee for the estate of William Bingham. Dr. Willing's grandfather was Thomas Willing, the first President of the Bank of North America, and his father was Thomas Mayne Willing, of the firm of Willing and Francis. From his father, it is said, he inherited the old Willing mansion. The wife of the deceased survives him.

There have been no changes in the Medical Corps of the Navy for the week ending Sept. 10, 1887.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from September 4, 1887, to September 10, 1887:

Major C. C. Byrne, Surgeon, detailed as a member of the Army Retiring Board in Washington City, vice Captain Washington Matthews, Assistant Surgeon, relieved. Par. 2, S. O., 208, A. G. O., Sept. 7, 1887.

Major R. M. O'Reilly, Surgeon, U. S. Army, ordered to proceed to Fort Niagara, New York, on public business, and upon completion thereof to return to his proper station, Washington, D. C. Par. 10, S. O., 205, A. G. O., Sept. 3, 1887.

Capt. H. O. Perley, Assistant Surgeon, ordered to accompany battalion of the 23d Infantry from Fort Wayne, Mich., to Chicago, to participate in the International Military Encampment to be held in that city in October next. Par. 1, S. O., 191, Hdqrs. Div. of the Atlantic, Sept. 8, 1887.

1st Lieutenant W. B. Banister, Assistant Surgeon, granted leave of absence for one month, with permission to apply for extension of one month, to take effect upon arrival at Fort Lowell, of Assistant Surgeon J. B. Girard. Par. 4, S. O., 91, Hdqrs. Dep't of Arizona, Aug. 29, 1887.

1st Lieutenant Wm. N. Suter, Assistant Surgeon, ordered to accompany battery "E," 3d Artillery, from Washington B'ks., D. C., to Philadelphia, on the 14th inst., to participate in the Military Parade during the celebration of the Centennial of the adoption of the Constitution, Sept. 15, 16 and 17, 1887. Par. 3, S. O., 191, Hdqrs. Div. of the Atlantic, Sept. 8, 1887.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, for the two weeks ending Sept. 10, 1887:

H. W. Sawtelle, Surgeon, granted leave of absence for fifteen days, August 31, 1887.

D. A. Carmichael, Passed Assistant Surgeon, granted leave of absence for thirty days, September 5, 1887.

J. B. Fattic, Assistant Surgeon, ordered to Cairo, Illinois, for temporary duty, September 6, 1887.